

STIC-Biotech/ChemLib

71313

From: Salimi, Ali
Sent: Thursday, July 18, 2002 2:28 PM
To: STIC-Biotech/ChemLib
Subject: 09/514,245

Can you please conduct a search and interference for the application serial no. 09/514,245:

SEQ ID NO: 25

Thanks!

Ali Salimi
AU 1648
Room 9D07
Mailbox 8E12

Point of Contact:
Susan Hanley
Technical Info. Specialist
CM1 6B05 Tel: 305-4053

CRFE

Searcher: _____
Phone: _____
Location: _____
Date Picked Up: _____
Date Completed: _____
Searcher Prep/Review: _____
Clerical: _____
Online time: _____

TYPE OF SEARCH:
NA Sequences: _____
AA Sequences: _____
Structures: _____
Bibliographic: _____
Litigation: _____
Full text: _____
Patent Family: _____
Other: _____

VENDOR/COST (where applic.)
STN: _____
DIALOG: _____
Questel/Orbit: _____
DRLink: _____
Lexis/Nexis: _____
Sequence Sys.: _____
WWW/Internet: _____
Other (specify): _____

GenCore version 4.5
Copyright (c) 1993 - 2000 Compugen Ltd.

OM nucleic - nucleic search, using sw model

Run on: July 23, 2002, 07:37:49 ; Search time 1857.76 Seconds
(without alignments)
7907.603 Million cell updates/sec

Title: US-09-514-245B-25
Perfect score: 702
Sequence: 1 atgacgtatccaaggagcg.....accccccaacttaacccttaa 702

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 1797656 seqs, 10463268293 residues

Total number of hits satisfying chosen parameters: 3595312

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : GenEmbl.*

- 1: gb_ba.*
- 2: gb_htg.*
- 3: gb_in.*
- 4: gb_om.*
- 5: gb_ov.*
- 6: gb_pat.*
- 7: gb_ph.*
- 8: gb_pl.*
- 9: gb_pr.*
- 10: gb_ro.*
- 11: gb_sts.*
- 12: gb_sy.*
- 13: gb_un.*
- 14: gb_vi.*
- 15: em_ba.*
- 16: em_fun.*
- 17: em_hum.*
- 18: em_in.*
- 19: em_mu.*
- 20: em_om.*
- 21: em_or.*
- 22: em_ov.*
- 23: em_pat.*
- 24: em_ph.*
- 25: em_pl.*
- 26: em_ro.*
- 27: em_sts.*
- 28: em_un.*
- 29: em_vi.*
- 30: em_htg_hum.*
- 31: em_htg_inv.*
- 32: em_htg_other.*
- 33: em_htgo_inv.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description

1	702	100.0	702	6	AX003277	AX003277 Sequence
c	702	100.0	1767	6	AX003274	AX003274 Sequence
2	702	100.0	1767	6	AX003275	AX003275 Sequence
c	698.8	99.5	1767	14	AF201311	AF201311 Porcine c
c	690.8	98.4	1767	14	AF201897	AF201897 Porcine c
c	682.8	97.3	1766	14	PCI293869	AJ293869 Porcine c
c	643.4	91.7	1767	14	AY035820	AY035820 Porcine c
c	626.8	89.3	1768	14	AF201309	AF201309 Porcine c
c	623.6	88.8	1768	14	AF086835	AF086835 Porcine c
c	623.6	88.8	1768	14	AF109398	AF109398 Porcine c
c	623.6	88.8	1768	14	AF154679	AF154679 Porcine c
c	623.6	88.8	1768	14	AF166528	AF166528 Porcine c
c	623.6	88.8	1768	14	AF201307	AF201307 Porcine c
c	623.6	88.8	1768	14	AF465211	AF465211 Porcine c
c	622	88.6	1768	14	AB072302	AB072302 Porcine c
c	622	88.6	1768	14	AF201308	AF201308 Porcine c
c	622	88.6	1768	14	AF201310	AF201310 Porcine c
c	622	88.6	2520	6	AX068058	AX068058 Sequence
c	620.4	88.4	1768	14	AF027217	AF027217 Porcine c
c	620.4	88.4	1768	14	AF085695	AF085695 Porcine c
c	620.4	88.4	1768	14	AF086836	AF086836 Porcine c
c	618.8	88.1	1768	14	AF086834	AF086834 Porcine c
c	618.8	88.1	1768	14	AF118095	AF118095 Porcine c
c	618.8	88.1	1768	14	AF264042	AF264042 Porcine c
c	618.8	88.1	1768	14	AF381175	AF381175 Porcine c
c	617.2	87.9	1768	14	AF381177	AF381177 Porcine c
c	617.2	87.9	1768	6	AX092147	AX092147 Sequence
c	617.2	87.9	1768	14	AB072303	AB072303 Porcine c
c	615.6	87.7	1768	14	PCAJ3185	AJ223185 Porcine c
c	615.6	87.7	1768	14	AB072301	AB072301 Porcine c
c	615.6	87.7	1768	14	AF112862	AF112862 Porcine c
c	615.6	87.7	1768	14	AF264039	AF264039 Porcine c
c	615.6	87.7	1768	14	AF264040	AF264040 Porcine c
c	614	87.5	1768	14	AF109397	AF109397 Bovine ci
c	614	87.5	1768	14	AF118097	AF118097 Porcine c
c	614	87.5	1768	14	AF381176	AF381176 Porcine c
c	612.4	87.2	1768	6	AX092146	AX092146 Sequence
c	612.4	87.2	1768	14	AF147751	AF147751 Porcine c
c	612.4	87.2	1768	14	AF264038	AF264038 Porcine c
c	612.4	87.2	1768	14	AF264041	AF264041 Porcine c
c	612.4	87.2	1768	14	AF264043	AF264043 Porcine c
c	612.4	87.2	1768	14	AF408635	AF408635 Porcine c
c	612.4	87.2	1768	14	AF454546	AF454546 Porcine c
c	610.8	87.0	1768	14	AF201305	AF201305 Porcine c

ALIGNMENTS

RESULT	1					
AX003277						
LOCUS	AX003277	702 bp	DNA	Linear	PAT 24-AUG-2000	
DEFINITION	Sequence 12 from Patent WO9929871.					
ACCESSION	AX003277					
VERSION	AX003277.1	GI:9927101				
KEYWORDS						
SOURCE	porcine circovirus.					
ORGANISM	porcine circovirus					
REFERENCE	Viruses; ssDNA viruses; Circoviridae; Circovirus.					
AUTHORS	1 (bases 1 to 702)					
TITLE	Hutet, E. and Albina, E.					
JOURNAL	Circovirus sequences related to piglet weight loss disease (pwd)					
FEATURES	Patent: WO 9929871-A 12 17-JUN-1999;					
source	HUTET EVELYNE (FR); ALBINA EMMANUEL (FR)					
	Location/Qualifiers					
	1..702					
	/organism="porcine circovirus"					
	/db_xref="taxon:46221"					
	/note="Circovirus MAP type B-ORF2"					
BASE COUNT	193 a	218 c	138 g	153 t		
ORIGIN						

FEATURES		Location/Qualifiers			
source		1..1767			
		/organism="porcine circovirus"			
		/db_xref="taxon:46221"			
		/note="Circovirus MAP type B-Brin polarit - (5'-3')"			
BASE COUNT	459 a	496 c	362 g	450 t	
ORIGIN					
	Query Match	100.0%;	Score 702;	DB 6;	Length 1767;
	Best Local Similarity	100.0%;	Pred. No. 3.2e-189;		
	Matches 702;	Conservative 0;	Mismatches 0;	Indels 0;	Gaps 0;
QY	1	atgacgtatccaaggagcggttacccaagaagaagacacacccgcccccgagccatcttggc	60		
Db	34	ATGACGTATCCAAGGAGCGGTTACCGAAGAAGACACCGCCCCCGCAGCCATCTTGGC	93		
QY	61	cagatcctccgcgcgcgcctggctgctccaccccgccacccgttacccgtggagaagg	120		
Db	94	CAGATCCTCCGCGCGCCCTGGCTCGTCCACCCCGCCACCGTTACCGCTGGAGAAGG	153		
QY	121	aaaaatggcatcttcaacacccgcctctcccgaccttcggatatactgtcaagcgaacc	180		
Db	154	AAAAATGGCATCTTCAACACCCGCTCTCCCGCACCTTCGGATATACTGTCAAGCGAACC	213		
QY	181	acagtcagaacgcctcctcctggcggtggacatgatgagattcaatattaatgactttctt	240		
Db	214	ACAGTCAGAACGCCCTCCTGGCGGTGGACATGATGAGATTCAATATTAAATGACTTTCTT	273		
QY	241	ccccaggagggggtcaaacccccgcctctgtgccctttgaatactacagaataaagaaag	300		
Db	274	CCCCCAGGAGGGGGTCAAACCCCCCGCTCTGTGCCCTTTGAATACTACAGAATAAGAAAG	333		
QY	301	gttaaggttgaaattctggccctgctccccgatcacccaggggtgacaggggagtgggctcc	360		
Db	334	GTTAAGGTGGAATTCTGGCCCTGCTCCCCGATCACCCAGGGTGACAGGGGAGTGGGCTCC	393		
QY	361	agtgctgttatttttagatgataaactttgtaacaaaggccacagccctcacctatgacccc	420		
Db	394	AGTGCTGTTATTTAGATGATAACTTTGTAAACAAAGGCCACAGCCCTCACCTATGACCCC	453		
QY	421	tatgtaaaactactcctcccgcataccataaaccagcccttctcctaccactcccggtac	480		
Db	454	TATGTAAACTACTCTCTCCGCCATACCATAACCCAGCCCTTCTCCTACCACCTCCCGGTAC	513		
QY	481	tttacccecaaacctgtcctagatttcactattgattacttccaaaccaaaacaaaaga	540		
Db	514	TTTACCCCAACCTGTCTTAGATTTCACTATTGATTACTTCCAACCAACAACAAAAGA	573		
QY	541	aaccagctgtggctgagactacaaaactgctggaaatgtagaccacgtaggcctcggcact	600		
Db	574	AACCAGCTGTGGCTGAGACTACAAACTGCTGGAATGTAGACCACGTAGGCCTCGGCACCT	633		
QY	601	gcgttcgaaaacagtatatacgaccaggaataacaatatccggtgtaaccatgtatgtacaa	660		
Db	634	GCGTTCGAAAACAGTATATACGACCAGGAATACAATATCCGTGTAAACCATGTATGTACAA	693		
QY	661	ttcagagaaatttaattttaagacccccccacttaacccttaa	702		
Db	694	TTCAGAGAATTTAATTTTAAAGACCCCCCCTTAACCCCTTAA	735		
RESULT	4				
AF201311/c					
LOCUS	AF201311	1767 bp	DNA	circular	VRL 23-FEB-2000
DEFINITION	Porcine circovirus type 2 isolate FRA3, complete genome.				
ACCESSION	AF201311				
VERSION	AF201311.1 GI:7021361				
KEYWORDS					
SOURCE	porcine circovirus type 2.				
ORGANISM	porcine circovirus type 2				
REFERENCE	Viruses; ssDNA viruses; Circoviridae; Circovirus.				
	1	(bases 1 to 1767)			

AUTHORS	Mankertz,A., Domingo,M., Folch,J.M., LeCann,P., Jestin,A., Segales,J., Chmielewicz,B., Plana-Duran,J. and Soike,D.				
TITLE	Characterisation of PCV-2 isolates from Spain, Germany and France				
JOURNAL	Virus Res. 66 (1), 65-77 (2000)				
MEDLINE	20120936				
REFERENCE	2 (bases 1 to 1767)				
AUTHORS	Mankertz,A., Domingo,M., Folch,J.M., LeCann,P., Jestin,A., Segales,J., Chmielewicz,B., Plana-Duran,J. and Soike,D.				
TITLE	Direct Submission				
JOURNAL	Submitted (03-NOV-1999) P24, Robert Koch Institut, Nordufer 20, Berlin 13353, Germany				
FEATURES	Location/Qualifiers				
source	1..1767				
	/organism="porcine circovirus type 2"				
	/isolate="FRA3"				
	/db_xref="taxon:85708"				
	/country="France"				
	complement(36..737)				
gene	/gene="cap"				
	complement(36..737)				
CDS	/gene="cap"				
	/note="Cap"				
	/codon_start=1				
	/product="putative capsid protein"				
	/protein_id="AAF35305.1"				
	/db_xref="GI:7021363"				
	/translation="MTYPRRRYRRRRHRRSHLGLQLRRRPWLVHPRHRYRWRKNGI				
	FNRLSRTFGYTVKRTTVTPSPWAVDMMRFNINDFLPGGSGNPRSPVFYYRIRKVK				
	VEFWPCSPITQGDGVSAAVILDDNFVKATALTYDPVYVNYSSRHTITQPFYSHSRY				
	FTPKPVLDDSTIDYFQPNKRNQLWLRLQTAGNVHDVHGLGTAFENSIYDQEYNIRVTMY				
	VQREFNFKDPLNP"				
gene	821..1765				
	/gene="rep"				
CDS	821..1765				
	/gene="rep"				
	/note="Rep"				
	/codon_start=1				
	/product="replicase"				
	/protein_id="AAF35304.1"				
	/db_xref="GI:7021362"				
	/translation="MPSKKNRSGQPQPHKRVFTLNNPSEDERKKIRDLPISLFDYFI				
	VGEEGNEEGRTPHLQGFANFVKQTFNKVWYLGARCHIEKAKGTDQQNKEYCSKEGN				
	LLMECGAPRSQGRSDLSTAVSTLLESGSLVTVAEQHPVTFVNRFRGLAELLKVSCKM				
	QKRDWKTNVHVIIVGPPCGCKSKWAANFADPETTYWKPRNKWWDGYHGEEVVVIDDFY				
	GWLPWDDLRLCDRYPLTVEKGTVPFLARSILITSNQTPLEWYSSTAVPAVEALYR				
	RITSLVFWKNATEQSTEEGGFVTLSPPCPEFYEINY"				
BASE COUNT	449 a	361 c	498 g	459 t	
ORIGIN					
Query Match 99.5%; Score 698.8; DB 14; Length 1767;					
Best Local Similarity 99.7%; Pred. No. 2.6e-188;					
Matches 700; Conservative 0; Mismatches 2; Indels 0; Gaps 0;					
QY	1	atgacgtatccaaggagcggttacccaagaagaagacacacccgcccccgagccatcttggc	60		
Db	737	ATGACGTATCCAAGGAGCGGTTACCGAAGAAGAAGACACCGCCCCCGCAGCCATCTTGGC	678		
QY	61	cagatcctccgcgcgcgcctggctgctccaccccgccacccggttacccgtgagaagg	120		
Db	677	CAGATCCTCGCGCGCGCCCTGGCTGCTGCCACCCCGCCACCGTTACCGCTGGAGAAGG	618		
QY	121	aaaaatggcatcttcaacacccgcctctcccgaccttcggatatactgtcaaggaacc	180		
Db	617	AAAAATGGCATCTTCAACACCCCGCCCTCTCCCGCACCTTCGGATATACTGTCAAGGAACC	558		
QY	181	acagtcagaacgcccctcctcggtggcggtgacatgatgagattcaatattaatgactttctt	240		
Db	557	ACAGTCAGAACGCCCTCCTGGCGGTGGACATGATGAGATTCAATATTAAATGACTTTCTT	498		
QY	241	ccccaggaggggggtcaaacccccgcctctgtgccctttgaatactacagaataaagaaag	300		
Db	497	CCCCCAGGAGGGGCTCAAACCCCCCGCTCTGTGCCCTTTGAATACTACAGAATAAGAAAG	438		

gene	/protein_id="AAG41231.1"									
	/db_xref="GI:11907593"									
CDS	/translation="MASTPASPAPSDILSSEPQSERPPGRWT"									
	1523. .1630									
	/gene="ORF10"									
	1523. .1630									
gene	/gene="ORF10"									
	/note="4.1 kDa"									
	/codon_start=1									
	/evidence=not_experimental									
CDS	/product="ORF10"									
	/protein_id="AAG41235.1"									
	/db_xref="GI:11907597"									
	/translation="MSTAQEGVLTVVRLTVYPKVRERRVLKMPFFLLQR"									
gene	1681. .1740									
	/gene="ORF7"									
	1681. .1740									
	/gene="ORF7"									
CDS	/note="1.9 kDa"									
	/codon_start=1									
	/evidence=not_experimental									
	/product="ORF7"									
gene	/protein_id="AAG41232.1"									
	/db_xref="GI:11907594"									
	/translation="MAAGAVSSSPVTPPWIRHI"									
	complement(join(1731. .1767,1. .92))									
CDS	/gene="ORF9"									
	complement(join(1731. .1767,1. .92))									
	/gene="ORF9"									
	/note="4.6 kDa"									
BASE COUNT	/codon_start=1									
	/evidence=not_experimental									
	/product="ORF9"									
	/protein_id="AAG41234.1"									
ORIGIN	/db_xref="GI:11907596"									
	/translation="MGLGSASSILLAGHVAAEVLPRCCRSALVILTAHFFRFQI"									
	448	a	361	c	500	g	458	t		
Query Match 98.4%; Score 690.8; DB 14; Length 1767;										
Best Local Similarity 99.0%; Pred. No. 5e-186;										
Matches 695; Conservative 0; Mismatches 7; Indels 0; Gaps 0;										
QY	1	atgacgtatccaaggagcggttacggaagaagacacgcccccgagccatcttggc	60							
Db	1734	ATGACGTATCCAAGGAGGCGTTACCGAGAAGAAGACACCGCCCCCGAGCCATCTTGGC	1675							
QY	61	cagatcctccgcccgcgcctggctgccacccccgccacggttacgctggagaagg	120							
Db	1674	CAGATCCTCCGCCCGCCCTGGCTCGTCCACCCCGCCACCGTTACCGTGGAGAAG	1615							
QY	121	aaaaatggcatcttcaacacccgcctctcccgcaccttcggatatactgtcaagcgaacc	180							
Db	1614	AAAAATGGCATCTTCAACACCCCGCCTCTCCCGCACCTTCGGATATACTGTCAAGCGAACC	1555							
QY	181	acagtcagaacgccctcctggcggtggacatgatgagattcaataatgactttctt	240							
Db	1554	ACAGTCAGAACGCCCTCCTGGCGGTGGACATGATGAGATTCAATATTAAATGACTTTCTT	1495							
QY	241	ccccaggaggggggtcaaacccccgcgtctgtgccctttgaatactacagaataaagaag	300							
Db	1494	CCCCAGGAGGGGGCTCAAACCCCGCTGTGTGCCCTTTGAATACTACAGAATAAGAAG	1435							
QY	301	gttaaggttgaattctggccctgctcccccgatcacccagggtgacaggggagtgggctcc	360							
Db	1434	GTTAAGGTGAATTCTGGCCCTGTCCCCGATCACCCAGGGTGACAGGGAGTGGGCTCC	1375							
QY	361	agtgcgtgtatttttagatgataaactttgtatacaaaaggccacagccctcacctatgacccc	420							
Db	1374	AGTGCTGTATTCTAGATGATAACTTTGTAAACAAAGGCCACAGCCCTCACCTATGACCCC	1315							
QY	421	tatgtaaactactcctccccgccataaccataaaccagcccttctcctaccactcccggtac	480							

Db	1314	TATGTAAACTACTCCTCCGCGCATACCATAAACCCAGCCCTTCTCCTACCACTCCCGCTAC	1255
QY	481	tttaccctccaaacctgtcctagatttcactattgattacttccaaccaacaacaaaga	540
Db	1254	TTACCCCCAAACCTGTCTAGATTCCACTATTGATTACTTCCAACCAACAACAAAAGA	1195
QY	541	aaccagctgtggctgagactacaactgctggaaatgtagaccacgtaggcctcggcact	600
Db	1194	AATCAGCTGTGGCTGAGACTACAAACTGCTGGAAATGTAGACCACGTAGGCCTCGGCAC	1135
QY	601	gcgttcgaaaaacagtatatatacgaccagggaataacaatatccgtgtaaccatgtatgtacaa	660
Db	1134	GGCTTCGAAAACAGTATATACGACGACGAGGAATACAATATCCGTGTAACCATGTATGTACAA	1075
QY	661	ttcagagaatttaatttaagacccccccacttaaccccttaa	702
Db	1074	TTCAGAGAATTTAATCTTAAAGACCCCCCTTAACCCCTTAA	1033
RESULT	6		
PCI293869/C			
LOCUS	PCI293869	1766 bp	DNA
DEFINITION	Porcine circovirus rep gene for replication-associated protein, isolate Imp.1147.		
ACCESSION	AJ293869		
VERSION	AJ293869.1	GI:14330690	
KEYWORDS	rep gene; replication-associated protein gene.		
SOURCE	porcine circovirus.		
ORGANISM	porcine circovirus		
REFERENCE	Viruses; ssDNA viruses; Circoviridae; Circovirus.		
AUTHORS	1 (bases 1 to 1766)		
	Meehan,B.M., McNeilly,F., McNair,I., Walker,I., Ellis,J.A., Krakowka,S. and Allan,G.M.		
TITLE	Isolation and characterization of porcine circovirus 2 from cases of sow abortion and porcine dermatitis and nephropathy syndrome		
JOURNAL	Arch. Virol. 146 (4), 835-842 (2001)		
MEDLINE	21296605		
REFERENCE	2 (bases 1 to 1766)		
AUTHORS	Meehan,B.M., McNeilly,F., McNair,I., Walker,I., West,K., Ellis,J.A., Krakowka,S., Kennedy,S. and Allan,G.M.		
TITLE	Isolation and characterization of porcine circovirus type 2 from cases of sow abortion and porcine dermatitis and nephropathy syndrome		
JOURNAL	Unpublished		
REFERENCE	3 (bases 1 to 1766)		
AUTHORS	Meehan,B.M.		
TITLE	Direct Submission		
JOURNAL	Submitted (25-AUG-2000) Meehan B.M., Veterinary Science, The Queen's University of Belfast, Stormont, BT4 3SD, UNITED KINGDOM		
FEATURES	Location/Qualifiers		
source	1..1766		
	/organism="porcine circovirus"		
	/virion		
	/isolate="Imp.1147"		
	/db_xref="taxon:46221"		
	/country="United Kingdom:UK"		
	/note="PCV2 isolated from case of porcine dermatitis and nephropathy syndrome in the UK"		
	59..1003		
gene	/gene="rep"		
	59..1003		
CDS	/gene="rep"		
	/codon_start=1		
	/product="replication-associated protein"		
	/protein_id="CAC41085.1"		
	/db_xref="GI:14330691"		
	/translation="MPSKKNRSGPQPHKRWVFTLNNPSEDERKKIRDLPLSLFDYFI		
	VGEEGNEEGRTPHLQGFANFVKQTFNKVWYLGARCHIEKAKGTDOQNKKEYCSKEGN		
	LLIECGAPRSQQRSDLSTAVSTLLESGSLVTVAEQHPVTFVRNFRGLAELLKVSQKM		
	QKRDWKTNVHVIIVGPPGCGKSKWAANFADPTTYWKPPRNKWDGYHGEVWVVDIFY		
	GWLPWDLLRLCDRYPLTVETKGGTVFPFLARSILITSNQTPLEWYSSTAVPAVEALYR		
	RITSLVFWKNATEQSTEEGGQFVTLSPPCPEFPYEINY"		

BASE COUNT	450 a	363 c	496 g	457 t	
ORIGIN					
Query Match	97.3%; Score 682.8; DB 14; Length 1766;				
Best Local Similarity	98.3%; Pred. NO. 9.6e-184;				
Matches 690; Conservative	0; Mismatches 12; Indels 0; Gaps 0;				
QY	1	atgacgtatccaaggagcggttaccgaaagaagaagacacacccgccccgcagccatcttggc	60		
Db	1742	ATGACGTTATCCAAGGAGGCGTTACCGGAGAAGAAGACACCGCCCCCGCAGCCATCTTGGC	1683		
QY	61	cagatcctccgcgcgcgcctggctgctgcacccccccaccgttacccgtggagaag	120		
Db	1682	CAGATCCTCCGCCCGCCCTCGCTCGTCCACCCCGCCACCGTTACCGCTGGAGAAGG	1623		
QY	121	aaaaatggcatcttcaacacccgcctctccgcaccttcggatatactgtcaagcgaacc	180		
Db	1622	AAAAATGGCATCTTCAACACCCCGCCTCTCCCGCACCTTCGGATATACTATCAAGCGAACC	1563		
QY	181	acagtcagaacgcccctcctggcggtggacatgatgagattcaatatattgaactttctt	240		
Db	1562	ACAGTCAAGACGCCCTCCTGGCGGTGGACATGATGAGATTCAATATTAAATGACTTCTT	1503		
QY	241	ccccaggaggggggtcaaacccccgcctctgtgccctttgaatactacagaaataagaaag	300		
Db	1502	CCCCCAGGAGGGGCTCAAACCCCCGCTCTGTGCCCTTTGAATACTACAGAATAAGAAAG	1443		
QY	301	gttaaggtgaattctggccctgctccccgataccacaggggtgacaggggagtgggctcc	360		
Db	1442	GTTAAGGTGAATTTTGGCCCTGTCTCCCGATCACCCAGGGTGACAGGGAGTGGGCTCC	1383		
QY	361	agtgcgttatttttagatgataaactttgttaacaaaggccacagccctcacctatgacccc	420		
Db	1382	AGTGCTGTATTCTTAGATGATAACTTTGTAAACAAGGCCACAGCCCTCACCTATGACCCC	1323		
QY	421	tatgtaaaactactcctccgcataccataaaccagcccttctcctaccactcccggtac	480		
Db	1322	TATGTAAACTACTCTCTCCGCCATACCATACCCAGCCCTTCTCCTACCACCTCCCGTTAC	1263		
QY	481	tttaccoccaaaccctgtcctagatttcaactattgattacttccaaacaaacaaaaaga	540		
Db	1262	TTTACCCCAAACTGTCTTAGATTCCACTATTGATTACTTCCAACCAACAAACAAAGA	1203		
QY	541	aaccagctgtgctgagactacaaaactgctggaatgtagaccacgtaggcctcggcact	600		
Db	1202	AATCAGCTGTGGCTGAGACTACAAGCTGCTGGAATGTAGACCACGTAGGCCTCGGCAC	1143		
QY	601	gcgttcgaaaacagtatatatacgaccaggaatacaatatccgtgtaaccatgtatgtacaa	660		
Db	1142	GCGTTCGAAAACAGTATATACGACCAGGAATACAATATCCGTGTAACCATGTATGTACAA	1083		
QY	661	ttcagagaatttaattttaagacccccccacttaaccccttaa	702		
Db	1082	TTCAGAGAAATTAAATCTTAAAGACCCCCCCCCTTAACCCCTTAA	1041		
RESULT	7				
AY035820/c					
LOCUS	AY035820	1767 bp	DNA	circular	VRL 13-JUN-2001
DEFINITION	Porcine circovirus type 2, complete genome.				
ACCESSION	AY035820				
VERSION	AY035820.1	GI:14422165			
KEYWORDS	porcine circovirus type 2.				
SOURCE	porcine circovirus type 2				
ORGANISM	Viruses; ssDNA viruses; Circoviridae; Circovirus.				
REFERENCE	1 (bases 1 to 1767)				
AUTHORS	Shengbo,C. and Huanchun,C.				
TITLE	Cloning and sequence analysis of the genome of Porcine Circovirus type 2 isolated from pig with PMWS in China				
JOURNAL	Unpublished				
REFERENCE	2 (bases 1 to 1767)				

AUTHORS	Shengbo,C. and Huanchun,C.
TITLE	Direct Submission
JOURNAL	Submitted (16-MAY-2001) Animal Medicine, Hua Zhong Agricultural University, Shi Zi Shan, Wuhan, Hubei 430070, P. R. China
FEATURES	Location/Qualifiers
source	1. .1767
	/organism="porcine circovirus type 2"
	/db_xref="taxon:85708"
	/country="China"
	/note="isolated from a pig with PMWS"
CDS	51. .995
	/note="ORF1"
	/codon_start=1
	/product="rep protein"
	/protein_id="AAK60462.1"
	/db_xref="GI:14422166"
	/translation="MPSKKNRSGPQPHKRWFTLNNPSEDERKKIRELPISLFDYFI
	VGEEGNEEGRTPHLQGFANFVKQTFNKVWYFGARCHIEKAKGTDQONKEYCSKEGN
	LLMECGAPRSQORSDLSSAVSTLLESGSLVTVABQHPVTFVRNFRGLAELLKVSCKM
	QKRDWKTNVHVIIVGPPGCGSKWAANFADPETTYWKPPRNKWDGYHGEEVVVDDFY
	GWLPWDDLLRLCDRYPLTVETKGTVPFLARSILITSNQTPLEWYSSTAVPAVEALYR
	RITSLVFWKNATEQSTEGGQFVTLSPPCPEFFYEINY"
misc_feature	117. .125
	/note="glycosylation site"
polyA_signal	327. .332
CDS	complement(357. .671)
	/note="ORF3"
	/codon_start=1
	/product="unknown"
	/protein_id="AAK60464.1"
	/db_xref="GI:14422168"
	/translation="MVTIPPLVSRWFPVCGFRVCKISSPFAFTTFRWPHNDVYIGLPI
	TLLHFFPAHFQKFSOPAEISDKRYRVLLCNGHQITALOOGTHSTROVTPLSLRSRSTL
	HQ"
CDS	complement(386. .565)
	/note="ORF4"
	/codon_start=1
	/product="unknown"
	/protein_id="AAK60465.1"
	/db_xref="GI:14422169"
	/translation="MTCTLVFQSRFCIFPLTFKSSASPRKFLTNVTGCCSATVTRLPL
	SNKVLTAIDRSLRCP"
misc_feature	complement(470. .478)
	/note="glycosylation site"
CDS	complement(688. .753)
	/note="ORF8"
	/codon_start=1
	/evidence=not_experimental
	/product="unknown"
	/protein_id="AAK60469.1"
	/db_xref="GI:14422173"
	/translation="MDIDHTVSDHPTAASHKSHQ"
misc_feature	816. .824
	/note="glycosylation site"
misc_feature	906. .914
	/note="glycosylation site"
polyA_signal	983. .988
CDS	1016. .1105
	/note="ORF5"
	/codon_start=1
	/evidence=not_experimental
	/product="unknown"
	/protein_id="AAK60466.1"
	/db_xref="GI:14422170"
	/translation="MVFIHGLSGGSLRLNSLNCYMVVTRIL"
polyA_signal	complement(1022. .1027)
CDS	complement(1030. .1734)
	/note="ORF2"
	/codon_start=1
	/product="capsid protein"
	/protein_id="AAK60463.1"
	/db_xref="GI:14422167"
	/translation="MTYPRRRRRRRPRSHLGQILRRRPWLHPRHRYRWRKNGI

/db_xref="GI:7021356"
/translation="MPSKKNRSGPQPHKRWVFTLNNPSEDERKKIRELPISLFDYFI
VGEEGNEEGRTPLHQGFANFVKQTFNKVYLGARCHIEKAKGTDQONKEYCSKEGN
LLIECGAPRSQQRSDLSTAVSTLLESGSLVVAEQHPVTFVRNFRGLAELLKVSQGM
QKRDWKTNVHVIIVGPPCGKSKWAANFADPETIYWKPPRNKWDGYHGEEVVVDDFY
GWLPWDLLRLCDRYPLTVETKGGTVPFLLARSILITSNQTPLEWYSSTAVPAVEALYR
RITSLVFWKNATEQSTEEGGQFVTLSPPCPEFFEINY"
BASE COUNT 456 a 358 c 500 g 454 t
ORIGIN

Query Match 89.3%; Score 626.8; DB 14; Length 1768;
Best Local Similarity 93.3%; Pred. No. 9.le-168;
Matches 655; Conservative 0; Mismatches 47; Indels 0; Gaps 0;

QY 1 atgacgtatccaaggaggcggttacccaagaagaagacacgcccccgagccatcttggc 60
|||||
Db 738 ATGACGTATCCAAGGAGCGGTTTCGGCAGACGAAGACACCGCCCCCGCAGCCATCTTGGC 679

QY 61 cagatcctccgcgcgcctcggtcgctcgccaccccccgccacggttacccgtggagaag 120
|||||
Db 678 CAGATCCTCCGCGCGCCCTTGGCTCGTCCACCCCGCCACCGTTACCGCTGGAGAAG 619

QY 121 aaaaatggcatcttcaacaccgcctctccgcaccttcggatatactgtcaagcgaaacc 180
|||||
Db 618 AAAAAATGGCATCTTCAACACACCGCCCTCTCCCGCACCTTCGGGATATACTGTCAAGGCTACC 559

QY 181 acagtcagaaacgcccctcctggtggcggtggacatgatgagattcaataatgactttctt 240
|||||
Db 558 ACAGTCAGAAACGCCCTCCTGGCGGTGGACATGATGAGATTTAATATTGACGACTTTTGT 499

QY 241 cccccaggagggggtcaaaacccccgcctctgtgcccccttgaataactacagaaataagaag 300
|||||
Db 498 CCCCCGGAGGGGGACCAACAAAATCTCTATACCCCTTTGAATACTACAGAATAAGAAAG 439

QY 301 gttaaggtgaattctggccctgctccccgatcacccaggggtgacagggagtggtcc 360
|||||
Db 438 GTTAAGGTTGAATTCTGGCCCTGCTCCCCAATCACCCAGGGTGATAGGGAGTGGGCTCC 379

QY 361 agtgcgttattttagatgataaactttgttaacaaagccacagccctcacctatgacccc 420
|||||
Db 378 ACTGCTGTTATTCTAGATGATAACTTTGTAACAAAGGCCACAGCCCTAACCTATGACCCC 319

QY 421 tatgtaaaactactcctccggccataaccataacccagcccttctcctaccactcccggtac 480
|||||
Db 318 TATGTAAACTACTCTCTCCGCCATACAATCCCCCAACCCCTTCTCTACTCCCGGTAC 259

QY 481 tttacccccaaaacctgtcctagatttcactattgtattacttccaaacaaacaaaaga 540
|||||
Db 258 TTTACCCCCAAAACCTGTTCTTGATTCCACTATTGTATTACTTCCAACCAATAACAAAAG 199

QY 541 aaccagctgtggtgagatcacaaaactgctggaaaatgtagaccacgtaggcctcggcaact 600
|||||
Db 198 AATCAGCTTTGGCTGAGGCTACAAAACCTCTGCAAATGTGGACACGTAGGCCTCGGCAC 139

QY 601 gcgttcgaaaaacagtatatatacgaccaggaatacaataatccgtgtgaaccatgtatgtacaa 660
|||||
Db 138 GCCTTCGAAAACAGTAAATACGACGAGGACTACAATAATCCGTGTAACCATGTATGTACAA 79

QY 661 ttcagagaatttaattttaagacccccccacttaacccttaa 702
|||||
Db 78 TTCAGAGAATTTAATCTTAAAGACCCCCCCTTAACCCCTAA 37

RESULT 9
AF086835/c
LOCUS AF086835 1768 bp DNA circular VRL 29-SEP-1998
DEFINITION Porcine circovirus strain 9741, complete genome.
ACCESSION AF086835
VERSION AF086835.1 GI:3661518
KEYWORDS .
SOURCE porcine circovirus.
ORGANISM porcine circovirus

Viruses: ssDNA viruses; Circoviridae; Circovirus.
1 (bases 1 to 1768)
Wang,L., Willson,P., Chow,B., Gibbons,E. and Babiuk,L.
Emergence of a new porcine circovirus
Unpublished
2 (bases 1 to 1768)
Wang,L., Willson,P., Chow,B., Gibbons,E. and Babiuk,L.
Direct Submission
Submitted (26-AUG-1998) VIDO, University of Saskatchewan, 120
Veterinary Road, Saskatoon, Saskatchewan S7N 5E3, Canada
Location/Qualifiers
1. 1768
/organism="porcine circovirus"
/strain="9741"
/db_xref="taxon:46221"
51. .995
/codon_start=1
/product="P35.8"
/protein_id="AAC61739.1"
/db_xref="GI:3661519"
/translation="MPSKKNRSGPQPHKRWVFTLNNPSENKRRKKIRELPISLFDYFI
VGEEGNEEGRTPLHQGFANFVKQTFNKVYLGARCHIEKAKGTDQONKEYCSKEGN
LLIECGAPRSQQRSDLSTAVSTLLESGILTVAKQHPVTFVKNFRGLAELLKVSQGM
QKRDWKTNVHVIIVGPPCGKSKWAANFANPETTYWKPPKNKWDGYHGKEKVVVDDFY
GWLPWDLLRLCDRYPLTVKTKGGTVPFLLARSILITSNQTPLEWYSSTAVPAVEALYR
RITSLVFWKNATEQSTEEGGQFVTLSPPCPEFFEINY"
complement(1034. .1735)
/codon_start=1
/product="P27.9"
/protein_id="AAC61740.1"
/db_xref="GI:3661520"
/translation="MTYPRRYYRRRRHRRPSHLGQILRRRPWLVHPRHRYRWRKNGI
FNTRLRSTFGYTVKRTTVTTPSWAVDMRMFKIDDFVPPGGTNKISIPFEYYIRKVK
VEFWPCSPITQDGRGVGSTAIIIDDNFVKATALTYPYVNYSSRHTIPQPFYSHSRY
FTPKPVLDSIDIFYQPNKRNQLWLRLOTSGNVDHVGLGFATFENSKYDQDYNIRVTMY
VQFREFNLKDPPLKP"

FEATURES
Source

CDS

CDS

BASE COUNT 464 a 360 c 480 g 464 t
ORIGIN

Query Match 88.8%; Score 623.6; DB 14; Length 1768;
Best Local Similarity 93.0%; Pred. No. 7.4e-167;
Matches 653; Conservative 0; Mismatches 49; Indels 0; Gaps 0;

QY 1 atgacgtatccaaggaggcggttacccaagaagaagacacgcccccgagccatcttggc 60
|||||
Db 1735 ATGACGTATCCAAGGAGCGGTTACCGCAGAAAGACACCGCCCCCGCAGCCATCTTGGC 1676

QY 61 cagatcctccgcgcgcctcggtcgctcgccaccccccgccacggttacccgtggagaag 120
|||||
Db 1675 CAGATCCTCCGCGCGCCCTCGGCTCGTCCACCCCGCCACCGCTACCGTTGGAGAAG 1616

QY 121 aaaaatggcatcttcaacaccgcctctcccgccaccttcggatatatactgtcaagcgaaacc 180
|||||
Db 1615 AAAAAATGGCATCTTCAACACCCGCCCTCTCCGCACTTTCGGATATACTGTCAAGCGTACC 1556

QY 181 acagtcagaaacgcccctcctggtggcggtggacatgatgagattcaataatgactttctt 240
|||||
Db 1555 ACAGTCACAAACGCCCTCCTGGCGGTGGACATGATGAGATTTAAAAATTGACGACTTTGTT 1496

QY 241 cccccaggagggggtcaaaacccccgcctctgtgcccccttgaataactacagaaataagaag 300
|||||
Db 1495 CCCCCGGGAGGGGGACCAACAAAATCTCTATACCCCTTTGAATACTACAGAATAAGAAAG 1436

QY 301 gttaaggttgaattctggccctgctccccgatcacccaggggtgacagggagtggtcc 360
|||||
Db 1435 GTTAAGGTTGAATTTCTGGCCCTGCTCCCCCATCACCCAGGGTGATAGGGAGTGGGCTCC 1376

QY 361 agtgcgttattttagatgataaactttgttaacaaagccacagccctcacctatgacccc 420
|||||
Db 1375 ACTGCTGTTATTTTAGATGATAACTTTTGTAAACAAAGGCCACAGCCCTTAACCTATGACCCA 1316

QY 421 tatgtaaaactactcctcccgccataaccataacccagcccttctcctaccactcccggtac 480

Qy 661 ttcagagaatttaatttaaagaccccccaacttaacccttaa 702
Db 1075 TTCAGAGAATTAAATCTAAAGACCCCCCACCTTAAACCTTAA 1034

RESULT 12
AF166528/c

LOCUS AF166528 1768 bp mRNA linear VRL 19-AUG-1999
DEFINITION Porcine circovirus complete genome.
ACCESSION AF166528
VERSION AF166528.1 GI:5739338

SOURCE porcine circovirus.
ORGANISM porcine circovirus
Viruses; ssDNA viruses; Circoviridae; Circovirus.
REFERENCE 1 (bases 1 to 1768)
AUTHORS yang,K.H., Lee,Y.F., Chao,D.S., Shieh,Y.C. and Lai,S.S.
TITLE Complete nucleotide sequences of porcine circovirus tainan strand outbreak in Taiwan

JOURNAL Unpublished
REFERENCE 2 (bases 1 to 1768)
AUTHORS yang,K.H., Lee,Y.F., Chao,D.S., Shieh,Y.C. and Lai,S.S.
TITLE Direct Submission
JOURNAL Submitted (08-JUL-1999) Veterinary Medicine, National Chia-Yi Institute of Technology, 300 Shei Fu Road, Lu Liao Li, Chia-Yi City 600, Taiwan

FEATURES
source Location/Qualifiers
1..1768
/organism="porcine circovirus"
/vrlon
/strain="Tainan"
/db_xref="taxon:46221"
/country="Taiwan"
51..995
/codon_start=1
/product="putative Rep protein"
/protein_id="AAD50432.1"
/db_xref="GI:5739339"
/translation="MPSKKNGRSGQPQHKRWVFTLNNPSEDERKKIRELPISLFDYFI VGEENEEGRTPHLOGFANFVKQTFNKVWYFGARCHIEKAKGTDOQNKKEYCSKEGN LLTECGAPRSQGRSDLSSTAVSTLSEGSLSVTVAEQHPVTFVRNFRGLAELLKVSQKM QKRWKTNVHVIVGPPGCGKSKWAANFADPETTYKPPRNKWDGYPHGEVVVIDDFY GWLPWDDLRLCDRYPLTVETKGTVPFLARSILITSNOTPLEWISSTAVPAVEALYR RITSLVFWKNATEQSTEEGGQFVTLSPPCPEFFEINY"

BASE COUNT 453 a 367 c 492 g 456 t
ORIGIN

Query Match 88.8%; Score 623.6; DB 14; Length 1768;
Best Local Similarity 93.0%; Pred. No. 7.4e-167;
Matches 653; Conservative 0; Mismatches 49; Indels 0; Gaps 0;

Qy 1 atgacgtatccaaggagcggttaccgaagaagaagacacccgccccgcagccatcttggc 60
Db 1735 ATGACGTATCCAAGAGGCGGTTTCCGCAGACGACGAAGACACCGCCCCCGCAGCCATCTTGGC 1676

Qy 61 cagatcctccgcgcgcgcgcgcctggctcgtccacccccgcacccggttaccgctggagaagg 120
Db 1675 CAGATCCTCCGCGCGCGCCCTGGCTCGTCCACCCCGCCACCGTTACCGCTGGAGAAGG 1616

Qy 121 aaaaatggcatcttcaacacccccgcctctcccgcaccttcggatatactgtcaaggaacc 180
Db 1615 AAAAATGGCATCTTCAACACCCCGCCTCTCCCGCACCTTCGGATATACTGTCAAGGCTACA 1556

Qy 181 acagtcagaacgcctcctcctcctggcggtggacatgatagattcaatattaatgactttctt 240
Db 1555 ACAGTCAGAACGCCCTCTCGGCGGTGGACATGATGAGATTAAATATTAAACGACTTTGTT 1496

Qy 241 cccccaggagggggtcaaacccccgcctcgtgcccctttgaatactacagaataagaag 300
Db 1495 CCCCCGGAGGGGGACCAACAAATCTCTATACCCTTTGAATACTACAGATAAGAAAG 1436

Qy 301 gtaagggttgattctggccctgctccccgatcacccagggtgacaggggagtggtctcc 360

Db 1435 GTTAAGGTGAATTCTGGCCCTGTTCCCAATCACCCAGGGTGACAGGGAGTGGGCTCC 1376

Qy 361 agtgctgtatttttagatgataaactttgtaacaaaggccacagccctcacctatgacccc 420
Db 1375 ACTGCTGTATTCTAGATGATAACTTTGTAACTAAGGCCACAGCCCTAACCCTATGACCCG 1316

Qy 421 tatgtaaaactactcctcccgccataaccataaccagcccttctcctaccactcccgggtac 480
Db 1315 TATGTAAACTACTCTCCCGCCATACAAATCCCCCAACCCCTTCTCCTACCACTCCCGGTAC 1256

Qy 481 tttaacccccaaacctgtcctagatttcaatttactattgatttacttccaaacaaacaaaga 540
Db 1255 TTTACCCCCAAACCTGTCTTGATTCCACTATTGATTACTTCCAACCAACAAACAAAGG 1196

Qy 541 aaccagctgtggctgagactacaaaactgctggaaatgtagaccacgtaggcctcggcact 600
Db 1195 AATCAGCTTTGGCTGAGGCTACAAACCTCGGCAAAATGTGGACCACGTAGGCTGGGCACT 1136

Qy 601 gcgttcgaaaaacagtatatatacgaccagggaataacataatcccggtgaacctgtatgtacaa 660
Db 1135 GCGTTCGAAAAACAGTAATACGACCAGGACTACAATATCCGTGTAACCTATGTATGTACAA 1076

Qy 661 ttcagagaatttaatttaaagaccccccaacttaacccttaa 702
Db 1075 TTCAGAGAATTAAATCTTAAAGACCCCCCACCTTAAACCTTAA 1034

RESULT 13
AF201307/c

LOCUS AF201307 1768 bp DNA circular VRL 23-FEB-2000
DEFINITION Porcine circovirus type 2 isolate GER3, complete genome.
ACCESSION AF201307
VERSION AF201307.1 GI:7021349

SOURCE porcine circovirus type 2.
ORGANISM porcine circovirus type 2
Viruses; ssDNA viruses; Circoviridae; Circovirus.
REFERENCE 1 (bases 1 to 1768)
AUTHORS Mankertz,A., Domingo,M., Folch,J.M., LeCann,P., Jestin,A., Segales,J., Chmielewicz,B., Plana-Duran,J. and Soike,D.
TITLE Characterisation of PCV-2 isolates from Spain, Germany and France
JOURNAL Virus Res. 66 (1), 65-77 (2000)
MEDLINE 20120936

REFERENCE 2 (bases 1 to 1768)
AUTHORS Mankertz,A., Domingo,M., Folch,J.M., LeCann,P., Jestin,A., Segales,J., Chmielewicz,B., Plana-Duran,J. and Soike,D.
TITLE Direct Submission
JOURNAL Submitted (03-NOV-1999) P24, Robert Koch Institut, Nordufer 20, Berlin 13353, Germany
FEATURES
source Location/Qualifiers
1..1768
/organism="porcine circovirus type 2"
/isolate="GER3"
/db_xref="taxon:85708"
/country="Germany"
complement(37..738)
/gene="cap"
complement(37..738)
/gene="cap"
/note="Cap"
/codon_start=1
/product="putative capsid protein"
/protein_id="AAF35297.1"
/db_xref="GI:7021351"
/translation="MTYPRRRRRRRRPRSHLQILRRRPWLHPRRHRYWRRKNGI FNTRLSRFTGYTVKATVTTPSWAVDMMRFNINDFVPPGGTNKISIPFEYVIRKVK VEFWPCSPITQDGRGVGSTAVILDDNFVTKATALTYDVPVNYSSRHTIPQPFVSHRY FTKPKVLDRTIDYFQPNKKNQLWLRLQTSANVDHVLGTAFENSKYDQDYNIRVTMY VQFREFNLKDPPLKP"
822..1766
/gene="rep"
822..1766

QY 241 cccccaggaggggggtcaaacccccgcctctgtgcccccttgaatactacacagataaagaaag 300
||||| ||||||| | ||| ||||| ||||||| ||||||| ||||||| ||||||| ||||||| |||||||
Db 1495 CCCCCGGAGGGGGGACCAACAAAATCTCTATACCCCTTTGAATACTACAGATAAGAAAA 1436

QY 301 gttaaggtgaattctgcccctgctccccgcgatccccagggtgacaggggagtgggctcc 360
||||| ||||||| ||||||| ||||||| ||||||| ||||||| ||||||| ||||||| ||||||| |||||||
Db 1435 GTTAAGGTTGAATTCTGGCCCTGCTCCCCCATCACCCAGGTGATAGGGGAGTGGGCTCC 1376

QY 361 agtgcgttatatttagatgataaacttttgaacaaaggccacagccctcacctatgacccc 420
| ||||||| ||||||| ||||||| ||||||| ||||||| ||||||| ||||||| ||||||| |||||||
Db 1375 ACTGCTGTTATTCTAGATGATAACTTTTGTAACATAAGGCCACAGCCCTAACCTATGACCCC 1316

QY 421 tatgtaaaactactcctcccgccataccataaocccagcccttctcctaccactcccggtac 480
||||| ||||||| ||||||| || ||| ||||| ||||||| ||||||| ||||||| ||||||| |||||
Db 1315 TATGTAAACTACTCCTCCCGCCATACAAATCCCCCAACCCTTCTCCTACCACCTCCCGTTAC 1256

QY 481 tttaaccccaaacctgtcctagatttcactattgattacttccaaacccaaacaaaaga 540
|| || ||||||| || || | ||||||| ||||||| ||||||| ||||||| ||||||| |||||||
Db 1255 TTCAACACCCAAACCTGTTCTTGACTCCACTATTGATTACTTCCAACCAAAATAACAAAAGG 1196

QY 541 aaccagctgtggctgagactacaaactgctggaaatgtagaccacgtaggcctcggcact 600
|| ||||| ||||||| ||||||| || ||||| ||||||| ||||||| ||||||| ||||||| |||||||
Db 1195 AATCAGCTTTGGCTGAGGCTACAAACCTCTAGAAATGTGGACCACGTAGGCCCTCGGCAC 1136

QY 601 gcgttcgaaaaacagtatatacgaccagggaatacaatatccgtgtgaacctgtatgtacaa 660
||||| ||||||| ||||||| ||||||| ||||||| ||||||| ||||||| ||||||| ||||||| |||||||
Db 1135 GCGTTCGAAAAACAGTAATACGACCAGGACTACAATATCCGTGTAAACCATGTATGTACAA 1076

QY 661 ttcagagaatttaattttaagacccccccacttaacccttaa 702
||||| ||||||| ||||||| ||||||| ||||||| ||||||| ||||||| ||||||| ||||||| |||||
Db 1075 TTCAAGAGAATTTAAATCTTAAAGACCCCCCCCACCTTAACCCCTAA 1034

RESULT 15
AB072302/c
LOCUS AB072302 1768 bp DNA circular VRL 03-OCT-2001
DEFINITION Porcine circovirus type 2 DNA, complete genome, strain:No.26.
ACCESSION AB072302
VERSION AB072302.1 GI:15887036
KEYWORDS
SOURCE porcine circovirus type 2 (strain:No.26, specific_host:pig) DNA.
ORGANISM porcine circovirus type 2
Viruses; ssDNA viruses; Circoviridae; Circovirus.
REFERENCE 1 (bases 1 to 1768)
AUTHORS Imai,K., Nishimori,T., Nishimori,K., Ishihara,R. and Sato,K.
TITLE Sequence of porcine circovirus type 2 from paraffin specimens of pigs with postweaning multisystemic wasting syndrome
JOURNAL Unpublished
REFERENCE 2 (bases 1 to 1768)
AUTHORS Imai,K. and Ishihara,R.
TITLE Direct Submission
JOURNAL Submitted (27-SEP-2001) Kunitoshi Imai, Hokkaido Research Station, National Institute of Animal Health, Clinical Microbiology Section; 4 Hitsujigaoka, Toyohira-ku, Sapporo, Hokkaido 062-0045, Japan
(E-mail:imaiku@affrc.go.jp, Tel:81-11-851-5226, Fax:81-11-853-0767)
FEATURES
source
1. .1768
/organism="porcine circovirus type 2"
/strain="No.26"
/specific_host="pig"
/db_xref="taxon:85708"
/country="Japan"
/note="viral gene obtained from formalin-fixed, paraffin-embedded lymph node from a pig affected by postweaning multisystemic syndrome"
51. .995
/note="ORF1"
/codon_start=1
/protein_id="BAB69437.1"
/db_xref="GI:15887037"
/translation="MPSKNGRSGPQPHKRVFTLNNPSEDRKKIRELPISLFDYFI
VGEENGEGRTPHLOGFANFVKQTFENKVYLGAICHIEKAKGTDQONKEYCSKEGN
LLMECGAPRSQQRSDLSTAVSTLLESGSLVTVAEQHPVTVFVRNFRGLAELLKVSQGM

CDS
complement(357..671)
/note="ORF3"
/codon_start=1
/protein_id="BAB69438.1"
/db_xref="GI:15887038"
/translation="MVTIPPLVSRWFPVCGFRVCKISSPPAFATPRWPHNYVYIRLPI
TLLHFPAHFQKFSQPAEISDKRYRVLLCNGHQTPALQQGTHSSRQVTPLSLRSRSSTF
HK"
1016..1177
/note="ORF5"
/codon_start=1
/protein_id="BAB69439.1"
/db_xref="GI:15887039"
/translation="MVFIHLGFKWGVFKIKFSELYIHGYTDIVVLVVFVTFERSAEA
YMYISSL"
complement(1034..1735)
/note="ORF2"
/codon_start=1
/protein_id="BAB69440.1"
/db_xref="GI:15887040"
/translation="MTYQRRRYRRRRHPRSHLGOILRRRPWLVHPRHRYRWRKNGI
FNRLSRTFGYTVKATVPTPSWAVDMLRFKIDDFVPPGGTNGKISIPFEYYIRKVK
VEFWPCSPITQDGRGVSSAVILDDNFVKATALYDVPVNYSSRHTITQPFYSHSRY
FTPKPVLDTIDYFQPNKRNQLWRLQTGTGNVDHVLGTAFENSKYDQDYNIRVTMY
VQREFNLKDPPLKP"
BASE COUNT 449 a 360 c 496 g 463 t
ORIGIN

Query Match 88.6%; Score 622; DB 14; Length 1768;
Best Local Similarity 92.9%; Pred. No. 2.1e-166;
Matches 652; Conservative 0; Mismatches 50; Indels 0; Gaps 0;

QY 1 atgacgtatccaaaggagcggttacogaagaagaacaccccgccagccatcttggc 60
||||| ||||||| ||||||| || ||||| ||||||| ||||||| ||||||| ||||||| |||||||
Db 1735 ATGACGTATCAAAGGAGGCGGTTACCGCAGACGAAGACACCGCCCCCGACCATCTTGGC 1676

QY 61 cagatcccgccgcccgcctgctgcgtccaccccgccacggtaccgctggagaag 120
||||| ||||||| ||||||| ||||||| ||||||| ||||||| ||||||| ||||||| |||||||
Db 1675 CAGATCCTCCGCGCGCCCTGGCTGCTCCACCCCGCCACCGTTACCGCTGGAGAAG 1616

QY 121 aaaaatggcatcttcaacacccgcctctcccgccaccttcggatataactgtcaagcaacc 180
||||| ||||||| ||||||| ||||||| ||||||| ||||||| ||||||| ||||||| |||||||
Db 1615 AAAAATGGCATCTTCAACACCCCGCCCTCTCCCGCACCTTCGGATATACTGTTAAGGTACC 1556

QY 181 acagtcagaacgcccctcctggtgggtggacatgatgagattcaataataatgactttctt 240
||||| ||||||| ||||||| ||||||| ||||||| ||||||| ||||||| ||||||| |||||||
Db 1555 ACAGTAAGAAGCGCCCTCCTCGGGCGGTGGACATGCTGAGATTTAAAAATTGACGACTTTGTT 1496

QY 241 ccccaggagggggtcaaacccccgcgtctgtgcccccttgaatactacagataaagaaag 300
||||| ||||||| || ||| ||||| ||||||| ||||||| ||||||| ||||||| |||||||
Db 1495 CCCCAGAGGGGGGACCAACAAAATCTCTATACCCCTTTGAATACTACAGAATAAGAAAG 1436

QY 301 gttaaggttgaattctgcccctgctccccgcgatccccagggtgacaggggagtgggctcc 360
||||| ||||||| ||||||| ||||||| ||||||| ||||||| ||||||| ||||||| |||||||
Db 1435 GTTAAAGTTGAATTCTGGCCCTGCTCCCAATCACCCAGGTGACAGGGGAGTTGGATCC 1376

QY 361 agtgcgttatatttagatgataaacttttgaacaaaggccacagccctcacctatgacccc 420
||||| ||||||| ||||||| ||||||| ||||||| ||||||| ||||||| ||||||| |||||||
Db 1375 AGTGCCTGTTATTCTAGATGATAACTTTGTAACAAAGGCCACAGCCCTTAACCTATGACCCC 1316

QY 421 tatgtaaaactactcctcccgccataccataaaccagcccttctcctaccactccccgtac 480
||||| ||||||| ||||||| ||||||| ||||||| ||||||| ||||||| ||||||| |||||||
Db 1315 TATGTAAACTACTCCTCCCGCCATACCATAACCCAGCCCTTCTCTCTACCACCTCCCGCTAT 1256

QY 481 tttaaccccaaacctgtcctagatttcaactattgattacttccaaacccaaacaaaaga 540
|| ||||||| ||||||| || ||| ||||| ||||||| ||||||| ||||||| ||||||| |||||
Db 1255 TTCACCCCAAAACCTGTCCTTGATGGGACAATCGATTACTTCCAACCAATAACAAAAGA 1196

QY 541 aaccagctgtggctgagactacaaactgctggaaatgtagaccacgtaggcctcggcact 600

[illegible]

Search completed: July 23, 2002, 09:55:49
Job time: 8280 sec

GenCore version 4.5
Copyright (c) 1993 - 2000 CompuGen Ltd.

OM nucleic - nucleic search, using sw model

Run on: July 23, 2002, 07:42:04 ; Search time 78.58 Seconds
(without alignments)
2194.384 Million cell updates/sec

Title: US-09-514-245B-25
Perfect score: 702
Sequence: 1 atgacgtatccaaggaggcg.....acccccacttaacccttaa 702

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 383533 seqs, 122816752 residues

Total number of hits satisfying chosen parameters: 767066

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Issued_Patents_NA:*
1: /cgn2_6/ptodata/2/ina/5A_COMB.seq:*
2: /cgn2_6/ptodata/2/ina/5B_COMB.seq:*
3: /cgn2_6/ptodata/2/ina/6A_COMB.seq:*
4: /cgn2_6/ptodata/2/ina/6B_COMB.seq:*
5: /cgn2_6/ptodata/2/ina/PCTUS_COMB.seq:*
6: /cgn2_6/ptodata/2/ina/backfiles1.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match %	Length	DB ID	Description
C 1	381.6	54.4	1767	4 US-09-347-594-1	Sequence 1, Appli
C 2	378.4	53.9	1767	4 US-09-347-594-2	Sequence 2, Appli
C 3	340	48.4	1768	4 US-09-347-594-3	Sequence 3, Appli
C 4	340	48.4	1768	4 US-09-347-594-4	Sequence 4, Appli
C 5	307.8	43.8	699	4 US-09-267-177-24	Sequence 24, Appli
C 6	307.8	43.8	1727	4 US-09-267-177-2	Sequence 2, Appli
C 7	307.8	43.8	1759	4 US-09-267-177-38	Sequence 38, Appli
C 8	307.8	43.8	1759	4 US-09-267-177-40	Sequence 40, Appli
C 9	303.2	43.2	687	4 US-09-267-177-25	Sequence 25, Appli
C 10	299	42.6	1674	4 US-09-267-177-1	Sequence 1, Appli
C 11	199.4	28.4	1759	4 US-09-347-594-5	Sequence 5, Appli
C 12	172.2	24.5	285	4 US-09-267-177-22	Sequence 22, Appli
C 13	44.6	6.4	4403765	4 US-09-103-840A-2	Sequence 2, Appli
C 14	41.8	6.0	322	4 US-09-117-121-41	Sequence 41, Appli
C 15	41.8	6.0	9997	1 US-08-246-982A-15	Sequence 15, Appli
C 16	41.8	6.0	9997	1 US-08-453-265-15	Sequence 15, Appli
C 17	41.8	6.0	10103	2 US-08-457-273B-7	Sequence 7, Appli
C 18	41.8	6.0	10348	2 US-08-457-273B-41	Sequence 41, Appli
C 19	41.8	6.0	10348	3 US-08-556-419-13	Sequence 13, Appli
C 20	41.8	6.0	10348	4 US-09-041-886-14	Sequence 14, Appli
C 21	41.8	6.0	10366	1 US-08-246-982A-5	Sequence 5, Appli
C 22	41.8	6.0	10366	1 US-08-453-265-5	Sequence 5, Appli
C 23	40	5.7	6530	2 US-08-146-930-1	Sequence 1, Appli
C 24	40	5.7	6530	3 US-08-458-240-1	Sequence 1, Appli
C 25	40	5.7	6530	5 PCT-US93-03993-1	Sequence 1, Appli
C 26	39.6	5.6	3000	4 US-08-460-269C-5	Sequence 5, Appli
C 27	39.4	5.6	1028	4 US-08-118-200-1	Sequence 1, Appli

C 28	39.4	5.6	1028	4 US-08-458-745-1	Sequence 1, Appli
C 29	39.4	5.6	4403765	4 US-09-103-840A-2	Sequence 2, Appli
C 30	39.4	5.6	4411529	4 US-09-103-840A-1	Sequence 1, Appli
C 31	39	5.6	2790	2 US-08-718-661-1	Sequence 1, Appli
C 32	39	5.6	3765	3 US-07-705-490-1	Sequence 1, Appli
C 33	39	5.6	3765	4 US-07-751-891B-1	Sequence 1, Appli
C 34	39	5.6	4362	2 US-08-455-073A-1	Sequence 1, Appli
C 35	38.4	5.5	2521	4 US-09-115-446-1	Sequence 1, Appli
C 36	38.4	5.5	2526	4 US-09-115-446-5	Sequence 5, Appli
C 37	37.8	5.4	843	4 US-08-339-214-7	Sequence 7, Appli
C 38	37.8	5.4	846	3 US-08-815-190A-1	Sequence 1, Appli
C 39	37.8	5.4	924	4 US-08-339-214-33	Sequence 33, Appli
C 40	37.8	5.4	924	4 US-08-339-214-34	Sequence 34, Appli
C 41	37.8	5.4	924	4 US-08-339-214-35	Sequence 35, Appli
C 42	37.8	5.4	972	4 US-09-479-524-1	Sequence 1, Appli
C 43	37.8	5.4	972	4 US-09-479-524-7	Sequence 7, Appli
C 44	37.8	5.4	1790	2 US-08-810-453-1	Sequence 1, Appli
C 45	37.8	5.4	1841	5 PCT-US95-00362-1	Sequence 1, Appli

ALIGNMENTS

RESULT 1
US-09-347-594-1/C
; Sequence 1, Application US/09347594
; Patent No. 6217883
; GENERAL INFORMATION:
; APPLICANT: ALLAN, Gordon M.
; APPLICANT: MEEHAN, Brian M.
; APPLICANT: ELLIS, John A.
; APPLICANT: KRAKOWKA, George S.
; APPLICANT: AUDONNET, Jean-Christophe F.
; TITLE OF INVENTION: PORCINE CIRCOVIRUS AND PARVOVIRUS VACCINE
; FILE REFERENCE: 454313-2338
; CURRENT APPLICATION NUMBER: US/09/347,594
; CURRENT FILING DATE: 1999-07-01
; EARLIER APPLICATION NUMBER: 98 08777
; EARLIER FILING DATE: 1998-07-06
; NUMBER OF SEQ ID NOS: 5
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 1
; LENGTH: 1767
; TYPE: DNA
; ORGANISM: Porcine circovirus
US-09-347-594-1

Query Match	54.4%	Score	381.6;	DB	4;	Length	1767;
Best Local Similarity	99.0%	Pred. No.	4.7e-109;				
Matches	384;	Conservative	0;	Mismatches	4;	Indels	0;
Gaps	0;						
QY 315	ctggccctgctccccgatcacccaggggtgacaggggagtggtcccgctgtatttt	374					
Db 1767	CTGGCCCTGCTCCCCGATCACCCAGGGTGACAGGGGAGTGGGCTCCAGTGTATTCT	1708					
QY 375	agatgataactttgtaacaaagccacagccctcacctatgacccctatgtaaaactactc	434					
Db 1707	AGATGATAACTTTGTAAACAAAGGCCACAGCCCTCACCTATGACCCCTATGTAAACTACTC	1648					
QY 435	ctccgccataaccataaccagcccttctcctaccactcccggtactttacccccaaacc	494					
Db 1647	CTCCGCCATACCATACCCAGCCCTTCTCCTACCCTCCCGCTACTTTACCCCAAAACC	1588					
QY 495	tgtcctagatttcactattgattacttccaaacaaacaaacaaacagctgtggct	554					
Db 1587	TGTCCTAGATTCCACTATTGATTACTTCCAACCAACAAACAAACAGACAGCTGTGGCT	1528					
QY 555	gagactacaaactgctggaaatgtagaccacgtaggcctcggcactcggttcgaaaaacag	614					
Db 1527	GAGACTACAAACTGCTGGAAATGTAGACCACGTAGGCCCTCGGCACGTGCGTTCGAAACAG	1468					
QY 615	tatatacgaccaggaataacaatatccgtgtaaccatgtatgtacaaattcagagaatttaa	674					

```
|||||
Db 1467 TATATACGACGAGGAATACAAATATCCGTGTAAACCATGTATGTACAAATTCAGAGAATTTAA 1408
QY 675 ttttaaagacccccccacttaacccttaa 702
| | | | |
Db 1407 TCTTAAAGACCCCCCCTTAACCCCTTAA 1380

RESULT 2
US-09-347-594-2/c
; Sequence 2, Application US/09347594
; Patent No. 6217883
; GENERAL INFORMATION:
; APPLICANT: ALLAN, Gordon M.
; APPLICANT: MEEHAN, Brian M.
; APPLICANT: ELLIS, John A.
; APPLICANT: KRAKOWKA, George S.
; APPLICANT: AUDONNET, Jean-Christophe F.
; TITLE OF INVENTION: PORCINE CIRCOVIRUS AND PARVOVIRUS VACCINE
; FILE REFERENCE: 454313-2338
; CURRENT APPLICATION NUMBER: US/09/347,594
; EARLIER APPLICATION NUMBER: 98 08777
; EARLIER FILING DATE: 1998-07-06
; NUMBER OF SEQ ID NOS: 5
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 2
; LENGTH: 1767
; TYPE: DNA
; ORGANISM: Porcine circovirus
US-09-347-594-2

Query Match 53.9%; Score 378.4; DB 4; Length 1767;
Best Local Similarity 98.5%; Pred. No. 4.6e-108;
Matches 382; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

QY 315 ctggccctgctcccgatcacccagggtgacaggggagtgggctccagtgctgtatttt 374
| | | | |
Db 1767 CTGGCCCTGTCTCCCGATCACCCAGGGTGACAGGGGAGTGGGCTCCAGTGCTGTTATTCT 1708

QY 375 agatgataactttgtaacaaaggccacagccctcacctatgacccctatgtaaaactactc 434
| | | | |
Db 1707 AGATGATAACTTTGTAAACAAAGGCCACAGCCCTCACCTATGACCCCTATGTAAACTACTC 1648

QY 435 ctcccgccataaccataaccagcccttctcctaccactcccggtactttacccccaaacc 494
| | | | |
Db 1647 CTCCCGCCATACCATTAACCCAGCCCTTCTCCTACCACCTCCCGCTACTTTACCCCCAAACC 1588

QY 495 tgtcctagatttcactatgattacttccaaacaaacaaacaaacaaacaaacagctgtggct 554
| | | | |
Db 1587 TGTCTAGATTCCACTATTGATTACTTCCAACCAACAAACAAAGAAATCAGCTGTGGCT 1528

QY 555 gagactacaaactgctggaaatgtagaccacgtaggcctcggcactgcgttcgaaaaacag 614
| | | | |
Db 1527 GAGACTACAAACTACTGGAAATGTAGACCACGTAGGCCTCGGCCTCGGCCTCGGCCTCGGCCT 1468

QY 615 tatatacgaccaggaataacaatatcccggtgaaccatgtatgtacaaattcagagaatttaa 674
| | | | |
Db 1467 TATATACGACGAGGAATACAAATATCCGTGTAAACCATGTATGTACAAATTCAGAGAATTTAA 1408

QY 675 ttttaaagacccccccacttaacccttaa 702
| | | | |
Db 1407 TCTTAAAGACCCCCCCTTAACCCCTTAA 1380

RESULT 3
US-09-347-594-3/c
; Sequence 3, Application US/09347594
; Patent No. 6217883
; GENERAL INFORMATION:
; APPLICANT: ALLAN, Gordon M.
; APPLICANT: MEEHAN, Brian M.
```

```
; APPLICANT: ELLIS, John A.
; APPLICANT: KRAKOWKA, George S.
; APPLICANT: AUDONNET, Jean-Christophe F.
; TITLE OF INVENTION: PORCINE CIRCOVIRUS AND PARVOVIRUS VACCINE
; FILE REFERENCE: 454313-2338
; CURRENT APPLICATION NUMBER: US/09/347,594
; EARLIER APPLICATION NUMBER: 98 08777
; EARLIER FILING DATE: 1998-07-06
; NUMBER OF SEQ ID NOS: 5
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 3
; LENGTH: 1768
; TYPE: DNA
; ORGANISM: Porcine circovirus
US-09-347-594-3

Query Match 48.4%; Score 340; DB 4; Length 1768;
Best Local Similarity 92.3%; Pred. No. 4.2e-96;
Matches 358; Conservative 0; Mismatches 30; Indels 0; Gaps 0;

QY 315 ctggccctgctcccgatcacccagggtgacaggggagtgggctccagtgctgtatttt 374
| | | | |
Db 1768 CTGGCCCTGTCTCCCGCATCACCCAGGGTGATAGGGGAGTGGGCTCCACTGCTGTTATTCT 1709

QY 375 agatgataaactttgtaacaaaggccacagccctcacctatgacccctatgtaaaactactc 434
| | | | |
Db 1708 AGATGATAACTTTGTAAACAAAGGCCACAGCCCTAACCTATGACCCCATATGTAAACTACTC 1649

QY 435 ctcccgccataaccataaccagcccttctcctaccactcccggtactttacccccaaacc 494
| | | | |
Db 1648 CTCCCGCCATACAAATCCCCCAACCCCTTCTCCTACCACCTCCCGTTACTTCAACCCAAACC 1589

QY 495 tgtcctagatttcactatgattacttccaaacaaacaaacaaacaaacagctgtggct 554
| | | | |
Db 1588 TGTCTTGACTCCACTATTGATTACTTCCAACCAAAATAACAAAGGAATCAGCTTTGGCT 1529

QY 555 gagactacaaactgctggaaatgtagaccacgtaggcctcggcactgcgttcgaaaaacag 614
| | | | |
Db 1528 GAGGCTACAAACCTCTAGAAATGTGGACCACTAGGCCTCGGCCTCGGCCTCGGCCTCGGCCT 1469

QY 615 tatatacgaccaggaataacaatatcccggtgaaccatgtatgtacaaattcagagaatttaa 674
| | | | |
Db 1468 TATATACGACGAGACTACAAATATCCGTGTAAACCATGTATGTACAAATTCAGAGAATTTAA 1409

QY 675 ttttaaagacccccccacttaacccttaa 702
| | | | |
Db 1408 TCTTAAAGACCCCCCCTTAACCCCTAA 1381

RESULT 4
US-09-347-594-4/c
; Sequence 4, Application US/09347594
; Patent No. 6217883
; GENERAL INFORMATION:
; APPLICANT: ALLAN, Gordon M.
; APPLICANT: MEEHAN, Brian M.
; APPLICANT: ELLIS, John A.
; APPLICANT: KRAKOWKA, George S.
; APPLICANT: AUDONNET, Jean-Christophe F.
; TITLE OF INVENTION: PORCINE CIRCOVIRUS AND PARVOVIRUS VACCINE
; FILE REFERENCE: 454313-2338
; CURRENT APPLICATION NUMBER: US/09/347,594
; EARLIER APPLICATION NUMBER: 98 08777
; EARLIER FILING DATE: 1998-07-06
; NUMBER OF SEQ ID NOS: 5
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 4
; LENGTH: 1768
; TYPE: DNA
; ORGANISM: Porcine circovirus
```

Db	1651	AACATCCTCCGGAGAGACCATATTTGGCACACCCCGCTTCAGAAACCGTTACAGATGG	1592
Qy	115	agaaggaataatggcatcttcaacacccgcctctcccgacacttcggatatatactgtcaag	174
Db	1591	CGCCGAAAGACGGGTATCTTCAATTCCCGCTTCTACAGAAATTGTACTCACCATAAAA	1532
Qy	175	cgaaccacagtcagaacgccctcctggcggtggacatgatgagattcaataattaatgac	234
Db	1531	GGA---GGATACTCGCAGCCATCTTGAATGTTAACTACCTCAAAATTC AACATCGGCCAG	1475
Qy	235	ttcttccccaggaggggggtcaaacccccgcctgtgtgcctttgaatactacagaata	294
Db	1474	TTCTTCCCCCTCAGGGGGCACCAACCCCTACCCCTACCTTCCAATACTACCGTATT	1415
Qy	295	agaaaggttaagttgaattctgtgccctgtctccccgatccccagggtgacaggggagtg	354
Db	1414	AGAAAGGCTAAATATGAATTTTACCCGAGAGACCCCATCAGCTCTAATCAAAGAGGTGT	1355
Qy	355	ggctccagtgctgtatttttagatgataaactttgtaacaaaggccacagccctcacctat	414
Db	1354	GGGTCCACTGTTGTTATCTTGGATGCCAACTTTGTAAACCCCTCCACCAACTTGGCCTAT	1295
Qy	415	gacctatgtaaactactctctcccgccataaccataaaccagcccttctctaccactcc	474
Db	1294	GACCCCTATATTAACTACTCTCTCCGCCACACCATAAGGCAGCCCTTTACCTACCACTCC	1235
Qy	475	cggtactttacccccaaacctgtcctagatttcaactattgattacttccaaaccaaac	534
Db	1234	AGGTACTTCACCCCAACCTGAGCTGGACCAAAACAATTGATTGGTTCACCCCAATAAT	1175
Qy	535	aaagaaaccagctgtggctgagactacaaactgctggaatgtagaccacgtaggcctc	594
Db	1174	AAAAGAAACCAGCTGTGGCTCCATTTAAATACCCACACCAATGTTCGAGCACACAGGCCTC	1115
Qy	595	ggcactgcgttcgaaaaacagtagtatatacgaccagggaatacaatatccgtgtaaccatgtat	654
Db	1114	GGCTATGGCTCCAAAATGCGACCCACAGCCCCAAAATTATGTGGTAAGGCTGACTATTAT	1055
Qy	655	gtacaattcagagaaatttaatttttaagaccccccaacttaa	695
Db	1054	GTACAAATTCAGAGAAATTATCCTAAAAGACCCCTCTAAATAA	1014

```

RESULT 7
US-09-267-177-38/c
; Sequence 38, Application US/09267177
; Patent No. 6287856
; GENERAL INFORMATION:
; APPLICANT: Poet, Steven E.
; APPLICANT: Ritchie, Branson W.
; APPLICANT: Niagro, Frank D.
; APPLICANT: Lukert, Phil D.
; TITLE OF INVENTION: Vaccines against Circovirus Infections
; FILE REFERENCE: 21099.0057
; CURRENT APPLICATION NUMBER: US/09/267,177
; CURRENT FILING DATE: 1999-03-12
; EARLIER APPLICATION NUMBER: 60/077,890
; EARLIER FILING DATE: 1998-03-13
; NUMBER OF SEQ ID NOS: 41
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 38
; LENGTH: 1759
; TYPE: DNA
; ORGANISM: porcine circovirus
US-09-267-177-38

```

Db	1723	ATGACGTGGCCAAAGGAGGGGTACCGCAGAGAAGGACCCGCGCCGACCATCTTGA	1664
QY	61	cagatcctccgcgcgcgccttggtctgctccacc-----cgcacacgttaccgctgg	114
Db	1663	AACATCCTCCGGAGAAGACCATATTTGGCACACCCCGCCTTCAGAAACCGTTACAGATGG	1604
QY	115	agaaggaaaaatggcatcttcaacaccccgctctcccgcaccttcgggatatactgtcaag	174
Db	1603	CGCGAAAGACGGGTATCTTCAATTCCGCGCTTCTACAGAAATTGTACTCACCATAAA	1544
QY	175	cgaaccacagtcagaacgcctctccttggtggcggtggacatgatgagattcaatattaatgac	234
Db	1543	GGA---GGATACTCGCAGCCATCTTGGAATGTTAACTACCTCAAATTCACATCGGCCAG	1487
QY	235	tttcttccccaggaggggtcaaacccccgcgtctgtgccccctttgaatactacagaata	294
Db	1486	TTCTCCCCCCTCAGGGGACCAACCCCCCTACCCCTACCTTTCGAATACTACCGTATT	1427
QY	295	agaaaggttaaggttgaaattctggccctgctccccgatcacccagggtgacagggagtg	354
Db	1426	AGAAAGGCTAAATATGAATTTACCCCGAGAGACCCCATCACCTCTAATCAAAGAGGTGT	1367
QY	355	ggctccagtgctgttatatttagatgataaactttgtaacaaaggccacagccctcacctat	414
Db	1366	GGTCCACTGTTGTTATCTTGGATGCCAACTTTGTAAACCCCTCCACCAACTTGGCCTAT	1307
QY	415	gacccctatgtaaactactctccgccataaccataacccagcccttctcctaccactcc	474
Db	1306	GACCCCTATATTAACTACTCTCCGCGCACACCATAAGGCAGCCCTTTACCTACCACTCC	1247
QY	475	cggtactttacccccaaacctgtccttagatttcaactattgattacttccaaaccaaacaac	534
Db	1246	AGGTACTTCACCCCCAAACCCTGAGCTGGACCAACAATTGATTGGTTCCACCCCAATAAT	1187
QY	535	aaaagaaaccagctgtggctgagactacaaactgctggaatgtagaccacgttaggcctc	594
Db	1186	AAAAGAAACCAAGCTGTGGCTCAATTAAATAACCCACACCAATGTTCGAGACACAGGCCTC	1127
QY	595	ggcactgcgttcgaaaaacagtatatacgaaccaggaataacaatatccgtgtaaccatgtat	654
Db	1126	GGCTATGCGCTCCAAAATGCAGCCACAGCCCCAAAATTATGTGGTAAGGCTGACTATTAT	1067
QY	655	gtacaattcagagaaatttaatttttaaagaccccccaacttaa	695
Db	1066	GTACAAATTCAGAGAAATTTATCCTAAAAGACCCCTCTAAATAA	1026

```

RESULT      8
US-09-267-177-40
; Sequence 40, Application US/09267177
; Patent No. 6287856
; GENERAL INFORMATION:
; APPLICANT: Poet, Steven E.
; APPLICANT: Ritchie, Branson W.
; APPLICANT: Niagro, Frank D.
; APPLICANT: Lukert, Phil D.
; TITLE OF INVENTION: Vaccines against Circovirus Infections
; FILE REFERENCE: 21099.0057
; CURRENT APPLICATION NUMBER: US/09/267,177
; CURRENT FILING DATE: 1999-03-12
; EARLIER APPLICATION NUMBER: 60/077,890
; EARLIER FILING DATE: 1998-03-13
; NUMBER OF SEQ ID NOS: 41
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 40
; LENGTH: 1759
; TYPE: DNA
; ORGANISM: porcine circovirus
US-09-267-177-40

```



```
Best Local Similarity 67.0%; Pred. No. 4.5e-86;
Matches 470; Conservative 0; Mismatches 222; Indels 9; Gaps 2;

QY 1 atgacgtatccaaggagcggttacccaagaagaagacacccgccccgcagccatcttggc 60
   ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 37 atgacgtgccaaaggagcggttacccgcagaagaagacccgccccgcagccatcttga 96

QY 61 cagatcctccgcccgcctggctgcgtccacc-----ccgccaccgttacgcgtgg 114
   | ||||| | | | | | | | | | | | | | | | | | | | | | | | | |
Db 97 aacatcctcggagaagaccatatatttggcacaccccgcttcagaaacggttacagatg 156

QY 115 agaaggaaaaatggcatcttcaacacccgcctctcccgcaccttcggatatactgtcaa 174
   | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db 157 cgccgaagacgggtatcttcaattccgcctttctacagaatttgtactcaccataaaa 216

QY 175 cgaaccacagtcagaacgcccctcctggcggtggacatgatgagattcaataatgac 234
   || | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db 217 gga---ggatactcgcagccatcttggaatgttaactacctcaaatccaatcggccag 273

QY 235 ttcttccccaggggggtcaaacccccgcgtctgtgccccttgaatactacagaata 294
   || || |||| | | | | | | | | | | | | | | | | | | | | | | |
Db 274 ttctccccctcagcggcaccacccccctacctaccttccaatactacctgtatt 333

QY 295 agaaaggttaagttgaattctgcccctgctccccgatcacccagggtgacaggggagt 354
   ||||| || | | | | | | | | | | | | | | | | | | | | | | | |
Db 334 agaaaggctaaatatgaattttacccccagagaccccatcacctctaatacaagaggtgt 393

QY 355 ggctccagtgctgtatttttagatgataaactttgtaacaaaggccacagccctcacctat 414
   || |||| | | |||| | | |||| | | |||| | | |||| | | |||| | | ||||
Db 394 ggttccactgtgttatcttggatgcaactttgtaacccccctccacaaacttggcctat 453

QY 415 gaccttatgtaaaactactcctcccgccataccataacccagccccttctctaccactcc 474
   ||||| || | | | | | | | | | | | | | | | | | | | | | | | |
Db 454 gaccttatattaactactcctcccgccacacataaggcagcccctttacctaccactcc 513

QY 475 cggtactttacccccaaacctgtcctagatttcaactattgattacttccaacaaacaac 534
   ||||| || | | | | | | | | | | | | | | | | | | | | | | | |
Db 514 aggtacttccccccaaacctgagctggaccaaacaattgattggttccaccaaataat 573

QY 535 aaagaaaccagctgtgctgagactacaaactgctggaatgtagaccacgtaggcctc 594
   ||||| || | | | | | | | | | | | | | | | | | | | | | | | |
Db 574 aaagaaaccagctgtgctccatttaataataccacaccaatgtcgagcacacaggcctc 633

QY 595 ggcactggttcgaaaaacagtatatatacgaccagggaatacaatatccgtgtaacctgtat 654
   || | |||| | | | | | | | | | | | | | | | | | | | | | | |
Db 634 ggctatgcgtccaaaaatgcagccacagccccaaaaattatgtggtgaaggctgactattat 693

QY 655 gtacaattcagagaatttaatttttaaaagaccccccaactaa 695
   ||||| ||||| ||||| | ||||| | | |||
Db 694 gtacaattcagagaatttatctctaaagacccctctaaataa 734
```

```
RESULT 9
US-09-267-177-25
; Sequence 25, Application US/09267177
; Patent No. 6287856
; GENERAL INFORMATION:
; APPLICANT: Poet, Steven E.
; APPLICANT: Ritchie, Branson W.
; APPLICANT: Niagro, Frank D.
; APPLICANT: Lukert, Phil D.
; TITLE OF INVENTION: Vaccines against Circovirus Infections
; FILE REFERENCE: 21099.0057
; CURRENT APPLICATION NUMBER: US/09/267,177
; CURRENT FILING DATE: 1999-03-12
; EARLIER APPLICATION NUMBER: 60/077,890
; EARLIER FILING DATE: 1998-03-13
; NUMBER OF SEQ ID NOS: 41
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 25
; LENGTH: 687
; TYPE: DNA
; ORGANISM: porcine circovirus
```

```
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (1)...(687)
US-09-267-177-25

Query Match 43.2%; Score 303.2; DB 4; Length 687;
Best Local Similarity 67.1%; Pred. No. 7.3e-85;
Matches 463; Conservative 0; Mismatches 218; Indels 9; Gaps 2;

QY 1 atgacgtatccaaggagcggttacccaagaagaagacacccgccccgcagccatcttggc 60
   ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 1 atgacgtggccaaggagcggttacgcgagaagaaggacccgccccgcagccatcttga 60

QY 61 cagatcctccgcccgcctggctgcgtccacc-----ccgccaccgttacgcgtgg 114
   | ||||| | | | | | | | | | | | | | | | | | | | | | | |
Db 61 aacatcctcggagaagaccatatatttggcacaccccgcttcagaaacggttacagatg 120

QY 115 agaaggaaaaatggcatcttcaacacccgcctctcccgaccttcggatatactgtcaa 174
   | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db 121 cgccgaagacgggtatcttcaattccgcctttctacagaatttgtactcaccataaaa 180

QY 175 cgaaccacagtcagaacgcccctcctggcggtggacatgatgagattcaataatgac 234
   || | | | | | | | | | | | | | | | | | | | | | | | | |
Db 181 gga---ggatactcgcagccatcttggaatgttaactacctcaaatccaatcggccag 237

QY 235 ttcttccccaggggggtcaaacccccgcgtctgtgccccttgaatactacagaata 294
   || || |||| | | | | | | | | | | | | | | | | | | | | | |
Db 238 ttctccccctcagcggcaccacccccctacctaccttccaatactacctgtatt 297

QY 295 agaaaggttaagttgaattctgcccctgctccccgatcacccagggtgacaggggagt 354
   ||||| || | | | | | | | | | | | | | | | | | | | | | | |
Db 298 agaaaggctaaatatgaattttacccccagagaccccatcacctctaatacaagaggtgt 357

QY 355 ggctccagtgctgtatttttagatgataaactttgtaacaaagccacagccctcacctat 414
   || |||| | | |||| | | |||| | | |||| | | |||| | | |||| | | ||||
Db 358 ggttccactgtgttatcttggatgccaactttgtaacccccctccacaaacttggcctat 417

QY 415 gaccttatgtaaaactactcctccgcccataccataacccagccccttctctaccactcc 474
   ||||| || | | | | | | | | | | | | | | | | | | | | | | |
Db 418 gaccttatattaactactcctccgcccacaccataaggcagcccctttacctaccactcc 477

QY 475 cggtactttacccccaaacctgtcctagatttcaactattgattacttccaacaaacaac 534
   ||||| || | | | | | | | | | | | | | | | | | | | | | | |
Db 478 aggtacttccccccaaacctgagctggaccaaacaattgattggttccaccaaataat 537

QY 535 aaagaaaccagctgtgctgagactacaaactgctggaaatgtagaccacgtaggcctc 594
   ||||| ||||| ||||| | | | | | | | | | | | | | | | | | | | |
Db 538 aaagaaaccagctgtggtccctttaaataccacaccaaatgtcgacacacaggcctc 597

QY 595 ggcactgcttcgaaaaacagtatatatacgaccagggaatacaatatccgtgtaacctgtat 654
   || | |||| | | | | | | | | | | | | | | | | | | | | | | |
Db 598 ggctatgcgtccaaaaatgcagccacagccccaaaaattatgtggtgaaggctgactattat 657

QY 655 gtacaattcagagaatttaatttttaaagac 684
   ||||| ||||| ||||| | |||||
Db 658 gtacaattcagagaatttatctctaaaaagac 687
```

```
RESULT 10
US-09-267-177-1/c
; Sequence 1, Application US/09267177
; Patent No. 6287856
; GENERAL INFORMATION:
; APPLICANT: Poet, Steven E.
; APPLICANT: Ritchie, Branson W.
; APPLICANT: Niagro, Frank D.
; APPLICANT: Lukert, Phil D.
; TITLE OF INVENTION: Vaccines against Circovirus Infections
; FILE REFERENCE: 21099.0057
; CURRENT APPLICATION NUMBER: US/09/267,177
; CURRENT FILING DATE: 1999-03-12
; EARLIER APPLICATION NUMBER: 60/077,890
```

```

; Sequence 41, Application US/09117121
; Patent No. 6307020
;
; GENERAL INFORMATION:
;
; APPLICANT: Hew, Choy
; APPLICANT: Gong, Zhiyuan
; TITLE OF INVENTION: Intracellular Antifreeze Polypeptides
; TITLE OF INVENTION: and Nucleic Acids
;
; NUMBER OF SEQUENCES: 46
;
; CORRESPONDENCE ADDRESS:
;
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
;
; COMPUTER READABLE FORM:
;
; MEDIUM TYPE: Floppy disk
;
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
;
; CURRENT APPLICATION DATA:
;
; APPLICATION NUMBER: US/09/117,121
; FILING DATE: 20-NOV-1998
; CLASSIFICATION: 435
;
; PRIOR APPLICATION DATA:
;
; APPLICATION NUMBER: WO PCT/CA97/00062
;

```

```

; FILING DATE: 30 JAN 1997
; ATTORNEY/AGENT INFORMATION:
; NAME: Weber, Kenneth A.
; REGISTRATION NUMBER: 31,677
; REFERENCE/DOCKET NUMBER: 016252-001610US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 41:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 322 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; FEATURE:
; NAME/KEY: -
; LOCATION: 1..322
; OTHER INFORMATION: /note= "probe pkenc 1"
; FEATURE:
; NAME/KEY: CDS
; LOCATION: 182..292
; OTHER INFORMATION: /product= "HPLC-8"
;
US-09-117-121-41

```

	Query Match	6.0%;	Score 41.8;	DB 4;	Length 322;
	Best Local Similarity	56.0%;	Pred. NO. 0.0012;		
	Matches	79; Conservative	0; Mismatches	62; Indels	0; Gaps
QY	16	agcggttacgaagaagaacacccgccccgcagcatcttggccagatcctccgcgc	75		
Dd	139	AGCGGCCCCACGACGAGCTGCCGCCCTTCCGCAGCGCCCCCAGACACCGCCTCTGACGC	198		
QY	76	cgcgccctggcttcaccacccccgcacccgttacgcgttgagaaaggaaaaattggcatcttc	135		
Dd	199	CGCGGCTGCAGCGCGCCCTTACCGCGGCCAATGCCGGCGCGCGCGCCAACTCACCGCGCA	258		
QY	136	aacacccgcctctcccgcacc	156		
Dd	259	CAACGCCCGCGCGCGCGCAGC	279		

US-08-246-982A-15
; Sequence 15, Application US/08246982A
; Patent No. 5686288

```

; GENERAL INFORMATION:
; APPLICANT: MacDonald, Marcy E.
; APPLICANT: Ambrose, Christine M.
; APPLICANT: Duyao, Mabel P.
; APPLICANT: Gusella, James F.
; TITLE OF INVENTION: Huntingtin DNA, Protein And Uses Thereof
; NUMBER OF SEQUENCES: 25
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Sterne, Kessler, Goldstein & Fox
; STREET: 1100 New York Avenue
; CITY: Washington
; STATE: D.C.
; COUNTRY: U.S.A.
; ZIP: 20005
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/246,982A
; FILING DATE: May 20, 1994
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Goldstein, Jorge, A.
; REGISTRATION NUMBER: 29,021
; REFERENCE/DOCKET NUMBER: 0609.3880002
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202) 371-2600
; TELEFAX: (202) 371-2540
; INFORMATION FOR SEQ ID NO: 15:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 997 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: both
; TOPOLOGY: linear
; FEATURE:
; NAME/KEY: CDS
; LOCATION: 90..9446
US-08-246-982A-15
```

```

Query Match      6.0%; Score 41.8; DB 1; Length 9997;
Best Local Similarity 63.4%; Pred. No. 0.0084;
Matches 64; Conservative 0; Mismatches 37; Indels 0; Gaps 0;

QY 13 aggaggcggtaccgaagaagacacgccccgcagccatcttgccagatccctccgc 72
   ||||| ||||| | ||||| ||||| ||||| | | ||||| ||
Db 157 AGCAGCCACCGCGCGAGCGCGCGCCACCGCGCGCGCGCGCGCGCTCAACCCCTCAGC 216

QY 73 cgccgccccctggctcgtccacccccgccaccggttacgcgtg 113
   ||||| | || | || ||||| ||||| |||||
Db 217 CGCCGCTCAGGGGCGAGCGCGCGCGCGCGCCACCGCGCGCTG 257
```

Search completed: July 23, 2002, 10:11:41
Job time: 8977 sec

GenCore version 4.5
Copyright (c) 1993 - 2000 CompuGen Ltd.

OM nucleic - nucleic search, using sw model

Run on: July 23, 2002, 07:34:24 ; Search time 1780.41 Seconds
(without alignments)
5321.731 Million cell updates/sec

Title: US-09-514-245B-25
Perfect score: 702
Sequence: 1 atgacgtatccaaggagcg.....acccccacttaacccttaa 702

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 13736207 seqs, 6748477542 residues

Total number of hits satisfying chosen parameters: 27472414

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database :

- EST:*
- 1: em_estba:*

2: em_esthum:*

3: em_estin:*

4: em_estmu:*

5: em_estov:*

6: em_estpl:*

7: em_estro:*

8: em_htc:*

9: gb_est1:*

10: gb_est2:*

11: gb_htc:*

12: gb_gss:*

13: em_gss_hum:*

14: em_gss_inv:*

15: em_gss_pln:*

16: em_gss_vrt:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
C 1	45.4	6.5	561	9 AI514058	AI514058 GH27112.5
C 2	44.6	6.4	939	12 CNS00CNG	AL059400 Drosophila
C 3	44.2	6.3	638	10 BI629442	BI629442 RH58310.5
C 4	44	6.3	445	9 AI292664	AI292664 GH15617.5
C 5	44	6.3	484	9 AI108264	AI108264 GH07058.5
C 6	44	6.3	493	9 AI405757	AI405757 GH25879.5
C 7	44	6.3	497	9 AI238309	AI238309 GH14332.5
C 8	44	6.3	532	9 AI134557	AI134557 GH12051.5
C 9	44	6.3	557	9 AI404106	AI404106 GH23705.5
C 10	44	6.3	557	9 AI406114	AI406114 GH26313.5
C 11	44	6.3	558	9 AI238565	AI238565 GH14632.5
C 12	44	6.3	561	9 AI404901	AI404901 GH24758.5
C 13	44	6.3	561	9 AI406248	AI406248 GH26478.5
C 14	44	6.3	575	9 AI403207	AI403207 GH22602.5
C 15	44	6.3	593	9 AI516823	AI516823 GH27392.5
C 16	44	6.3	597	10 BI627948	BI627948 RH69450.5
C 17	44	6.3	613	9 AI237965	AI237965 GH13172.5

C 18	43.8	6.2	554	9 AI293059	AI293059 GH16139.5
C 19	43.8	6.2	870	10 BG445569	BG445569 GA_Ea002
C 20	43.4	6.2	479	9 AI402428	AI402428 GH21648.5
C 21	43.2	6.2	521	9 AA530753	AA530753 vj44e07.r
C 22	43.2	6.2	555	9 AI296628	AI296628 LP10591.5
C 23	43.2	6.2	574	10 BI619435	BI619435 RH50469.5
C 24	43.2	6.2	575	10 BI619848	BI619848 RH50971.5
C 25	43.2	6.2	591	9 AI857154	AI857154 603007B08
C 26	43.2	6.2	835	11 AK020691	AK020691 Mus muscu
C 27	43	6.1	452	9 AA589477	AA589477 vl47hl2.s
C 28	43	6.1	514	9 AA798859	AA798859 vv94a07.r
C 29	43	6.1	617	10 BG591496	BG591496 EST499338
C 30	43	6.1	636	9 AA698799	AA698799 HL05714.5
C 31	43	6.1	650	10 BG599848	BG599848 EST504743
C 32	43	6.1	706	10 BM110666	BM110666 EST558202
C 33	43	6.1	710	10 BF253141	BF253141 EST445636
C 34	42.8	6.1	1064	12 CNS01N6W	AL151849 Anopheles
C 35	42.6	6.1	449	9 AW615354	AW615354 hh74b04.x
C 36	42.6	6.1	494	9 AI141028	AI141028 oy68hl2.x
C 37	42.6	6.1	496	9 AI364938	AI364938 qz23d02.x
C 38	42.6	6.1	574	10 BI799844	BI799844 HI42B04.E
C 39	42.6	6.1	575	10 C99980	C99980 C99980 Oryz
C 40	42.6	6.1	592	9 AI017603	AI017603 ou29e09.x
C 41	42.6	6.1	657	10 BI561078	BI561078 603254284
C 42	42.4	6.0	459	9 AU181814	AU181814 AU181814
C 43	42.4	6.0	580	9 AI238831	AI238831 GH14954.5
C 44	42.4	6.0	653	10 BI614132	BI614132 RH43436.5
C 45	42.4	6.0	655	10 BI750241	BI750241 Fg02_06b0

ALIGNMENTS

RESULT 1

AI514058/c

LOCUS

AI514058 GH27112.5prime GH Drosophila melanogaster head pOT2 Drosophila melanogaster cDNA clone GH27112 5prime, mRNA sequence.

ACCESSION

AI514058

VERSION

AI514058.1 GI:4418120

KEYWORDS

EST.

SOURCE

fruit fly.

ORGANISM

Drosophila melanogaster
Eukaryota; Metazoa; Arthropoda; Tracheata; Hexapoda; Insecta; Pterygota; Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha; Ephydroidea; Drosophilidae; Drosophila.

REFERENCE

1 (bases 1 to 561)
Harvey,D., Brokstein,P., Hong,L., Evans-Holm,M., Su,C., Tsang,G., Lewis,S. and Rubin,G.M.
BDGP/HMMI Drosophila EST Project
Unpublished (2001)
Contact: Stapleton, M.
BDGP

AUTHORS

TITLE

JOURNAL

COMMENT

FEATURES

source

1..561
/organism="Drosophila melanogaster"
/db_xref="taxon:7227"
/clone="GH27112"
/clone_lib="GH Drosophila melanogaster head pOT2"
/sex="male and female"
/dev_stage="adult"
/lab_host="DH5 - alpha"
/note="Organ: head; Vector: pOT2; Site_1: EcoRI; Site_2: XhoI; Sized fractionated cDNAs were directly ligated into pOT2. Plasmid cDNA library."
74 a 110 c 244 g 133 t

BASE COUNT

ORIGIN

GenCore version 4.5
Copyright (c) 1993 - 2000 CompuGen Ltd.

QM nucleic - nucleic search, using sw model

Run on: July 23, 2002, 07:43:54 ; Search time 268.88 Seconds
(without alignments)
4482.572 Million cell updates/sec

Title: US-09-514-245B-25
Perfect score: 702
Sequence: 1 atgacgtatccaaggaggcg.....acccccacttaacccttaa 702

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 1736436 seqs, 858457221 residues

Total number of hits satisfying chosen parameters: 3472872

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : N_Geneseq_032802: *
1: /SIDS5/gcgdata/geneseq/geneseq-emb1/NA1980.DAT: *
2: /SIDS5/gcgdata/geneseq/geneseq-emb1/NA1981.DAT: *
3: /SIDS5/gcgdata/geneseq/geneseq-emb1/NA1982.DAT: *
4: /SIDS5/gcgdata/geneseq/geneseq-emb1/NA1983.DAT: *
5: /SIDS5/gcgdata/geneseq/geneseq-emb1/NA1984.DAT: *
6: /SIDS5/gcgdata/geneseq/geneseq-emb1/NA1985.DAT: *
7: /SIDS5/gcgdata/geneseq/geneseq-emb1/NA1986.DAT: *
8: /SIDS5/gcgdata/geneseq/geneseq-emb1/NA1987.DAT: *
9: /SIDS5/gcgdata/geneseq/geneseq-emb1/NA1988.DAT: *
10: /SIDS5/gcgdata/geneseq/geneseq-emb1/NA1989.DAT: *
11: /SIDS5/gcgdata/geneseq/geneseq-emb1/NA1990.DAT: *
12: /SIDS5/gcgdata/geneseq/geneseq-emb1/NA1991.DAT: *
13: /SIDS5/gcgdata/geneseq/geneseq-emb1/NA1992.DAT: *
14: /SIDS5/gcgdata/geneseq/geneseq-emb1/NA1993.DAT: *
15: /SIDS5/gcgdata/geneseq/geneseq-emb1/NA1994.DAT: *
16: /SIDS5/gcgdata/geneseq/geneseq-emb1/NA1995.DAT: *
17: /SIDS5/gcgdata/geneseq/geneseq-emb1/NA1996.DAT: *
18: /SIDS5/gcgdata/geneseq/geneseq-emb1/NA1997.DAT: *
19: /SIDS5/gcgdata/geneseq/geneseq-emb1/NA1998.DAT: *
20: /SIDS5/gcgdata/geneseq/geneseq-emb1/NA1999.DAT: *
21: /SIDS5/gcgdata/geneseq/geneseq-emb1/NA2000.DAT: *
22: /SIDS5/gcgdata/geneseq/geneseq-emb1/NA2001A.DAT: *
23: /SIDS5/gcgdata/geneseq/geneseq-emb1/NA2001B.DAT: *
24: /SIDS5/gcgdata/geneseq/geneseq-emb1/NA2002.DAT: *

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	622	88.6	2520	22	AAF75827 Plasmid pJP102 DNA
2	622	88.6	2520	22	AAF28317 pJP102 donor plasm
C 3	622	88.6	2769	22	AAF75830 Plasmid pJP107 DNA
C 4	622	88.6	3609	22	AAF28320 pJP107 donor plasm
C 5	620.4	88.4	1768	20	AAX83754 Porcine circovirus
C 6	617.2	87.9	1768	22	AAF75841 PCV DNA fragment o
C 7	612.4	87.2	1768	22	AAF75840 PCV DNA fragment o
C 8	595.6	84.8	1786	20	AAX83755 Porcine circovirus
C 9	590.8	84.2	1361	20	AAX83757 Porcine circovirus

C 10	381.6	54.4	1767	20	AAX35378 Nucleotide sequenc
C 11	381.6	54.4	1767	20	AAX35210 Nucleotide sequenc
C 12	381.6	54.4	1767	21	AAZ56869 DNA sequence of PC
C 13	381.6	54.4	1767	22	AAF75835 PCV DNA fragment o
C 14	378.4	53.9	1767	20	AAX35379 Nucleotide sequenc
C 15	378.4	53.9	1767	20	AAX35211 Nucleotide sequenc
C 16	378.4	53.9	1767	21	AAZ56870 DNA sequence of PC
C 17	378.4	53.9	1767	22	AAF75836 PCV DNA fragment o
C 18	340	48.4	1768	20	AAX35380 Nucleotide sequenc
C 19	340	48.4	1768	20	AAX35381 Nucleotide sequenc
C 20	340	48.4	1768	20	AAX35213 Nucleotide sequenc
C 21	340	48.4	1768	20	AAX35212 Nucleotide sequenc
C 22	340	48.4	1768	21	AAZ56871 DNA sequence of PC
C 23	340	48.4	1768	21	AAZ56872 DNA sequence of PC
C 24	340	48.4	1768	22	AAF75837 PCV DNA fragment o
C 25	340	48.4	1768	22	AAF75838 PCV DNA fragment o
C 26	339	48.3	1768	20	AAX35382 Nucleotide sequenc
C 27	339	48.3	1768	20	AAX35012 Genomic DNA sequen
C 28	339	48.3	1768	20	AAX35214 Nucleotide sequenc
C 29	311	44.3	1759	20	AAX85593 Nucleotide sequenc
C 30	307.8	43.8	1759	20	AAX87992 Porcine circovirus
C 31	273.4	38.9	7460	22	AAH74867 Nucleotide sequenc
C 32	256.4	36.5	5285	22	AAH74865 Nucleotide sequenc
C 33	256.4	36.5	5650	22	AAH74866 Nucleotide sequenc
C 34	203.6	29.0	1759	20	AAX35013 Nucvleotide sequen
C 35	199.4	28.4	1759	22	AAF75839 DNA fragment of PK
C 36	44.6	6.4	4403765	22	AAI99683 Mycobacterium tube
C 37	44	6.3	1181	23	ABL24269 Drosophila melanog
C 38	44	6.3	4905	23	ABL24268 Drosophila melanog
C 39	43.4	6.2	10348	22	ABA08714 Human Huntington's
C 40	42.6	6.1	592	21	AAX93361 Sequence encoding
C 41	41.8	6.0	322	18	AAT75508 P. americanus anti
C 42	41.8	6.0	322	21	AAZ49961 Winter flounder li
C 43	41.8	6.0	515	20	AAX18930 Human huntingtin g
C 44	41.8	6.0	1371	18	AAT78974 Mouse Huntington's
C 45	41.8	6.0	9997	18	AAT97925 Composite sequence

ALIGNMENTS

RESULT 1
AAF75827
ID AAF75827 standard; DNA; 2520 BP.
XX
AC AAF75827;
XX
DT 18-MAY-2001 (first entry)
XX
DE Plasmid pJP102 DNA fragment.
XX
KW ALVAC; porcine circovirus-2; vaccine; pig; myocarditis; abortion;
KW intrauterine infection; multisystemic wasting syndrome; ds.
XX
OS Unidentified.
XX
PN WO200116330-A2.
XX
PD 08-MAR-2001.
XX
PF 28-AUG-2000; 2000WO-EP08781.
XX
PR 31-AUG-1999; 99US-0151564.
PR 31-MAY-2000; 2000US-0583350.
XX
PA (MERI-) MERIAL.
PA (UYSA-) UNIV SASKATCHEWAN.
PA (UYBE-) UNIV QUEENS BELFAST.
XX
PI Ellis JA, Allan GM, Meehan B, Clark E, Haines D, Hassard L;
PI Harding J, Charreyre CE, Chappuis GE, Krakowka GS, Audonnet JF;
PI Mcneilly F;
XX

DR WPI; 2001-244408/25.
DR P-PSDB; AAB73272.
XX
PT Use of porcine circovirus-2 immunogen to formulate a vaccine
PT composition to treat pigs against myocarditis, abortion, intrauterine
PT infection and/or post-weaning, multisystemic wasting syndrome
PT associated with PCV-2 -
XX
PS Example 2 #3; Fig 3 #1; 134pp; English.
XX
CC The present invention relates to the use of porcine circovirus-2 (PCV-2)
CC immunogen to formulate a vaccine composition to prevent or treat pigs
CC against myocarditis and/or abortion and/or intrauterine infection and/or
CC post-weaning, multisystemic wasting syndrome and other pathological
CC sequelae associated with PCV-2. The present sequence is a DNA fragment of
CC a plasmid, which expresses gene products of PCV-2.
XX
SQ Sequence 2520 BP; 777 A; 482 C; 382 G; 879 T; 0 other;

Query Match 88.6%; Score 622; DB 22; Length 2520;
Best Local Similarity 92.9%; Pred. No. 7.8e-178;
Matches 652; Conservative 0; Mismatches 50; Indels 0; Gaps 0;

Qy 1 atgacgtatccaaggagcggttacccaagaagaagacacccgcccgagccatcttggc 60
|||
Db 1402 atgacgtatccaaggagcggttacccaagaagaagacacccgcccgagccatcttggc 1461

Qy 61 cagatcctccgcgcgcgcctggtctccaccccgccacccgttacccgctggagaagg 120
|||
Db 1462 cagatcctccgcgcgcgcctggtctccaccccgccacccgttacccgctggagaagg 1521

Qy 121 aaaaatggcatcttcaacacccgcctctcccgacattcggtatactgtcaaggaacc 180
|||
Db 1522 aaaaatggcatcttcaacacccgcctctcccgacattcggtatactgtcaaggtacc 1581

Qy 181 acagtcagaagccctcctctgggcggtggacatgatgagattcaatattaatgactttctt 240
|||
Db 1582 acagtcacaacgcctcctctgggcggtggacatgatgagatttaaaattgacgactttgtt 1641

Qy 241 cccccaggagggggtcaaacccccgcctctgtgcctttgaatactacagaataagaaaag 300
|||
Db 1642 cccccggagggggaccacaataatctctatacccttgaatactacagaataagaaaag 1701

Qy 301 gtaaggttgaattctgcccctgctccccgatcacccaggggtgacaggggagtggtctcc 360
|||
Db 1702 gtaaggttgaattctgcccctgctccccgatcacccaggggtgagggagtggtctcc 1761

Qy 361 agtgctgttattttagatgataaactttgttaacaaggccacagccctcacctatgacccc 420
|
Db 1762 actgctgttattctagatgataaactttgttaacaaggccacagccctaacctatgaccca 1821

Qy 421 tatgtaaaactactcctccgcgcataaccataaccagcccttctctaccactcccggtac 480
|||
Db 1822 tatgtaaaactactcctccgcgcataacaatcccccaacccttctctaccactcccggtac 1881

Qy 481 tttacccccaaacctgtcctagatttcaactattgattacttccaacccaacaaacaaaaga 540
||
Db 1882 ttcacacccaacacctgttcttgactccactatgattacttccaacccaacaaacaaaagg 1941

Qy 541 aaccagctgtgctgagactacaacacgtgctggaatgtagaccacgtaggcctcgccact 600
||
Db 1942 aatcagcttggctgagactacaacacctctggaatgtggaccacgtaggcctcgcgct 2001

Qy 601 gcgttcgaaaaacagtatatacgaccagggaataacaatatccgtgtaaccatgtatgtacaa 660
|||
Db 2002 gcgttcgaaaaacagtaaatacgaccaggactacaatatccgtgtaaccatgtatgtacaa 2061

Qy 661 ttcagagaaatttaattttaagacccccccacttaaaccccttaa 702
|||
Db 2062 ttcagagaaatttaattcttaagacccccccacttaaaccccttaa 2103

RESULT 2
AAF28317
ID AAF28317 standard; DNA; 2520 BP.
XX
AC AAF28317;
XX
DT 30-MAR-2001 (first entry)
XX
DE JJP102 donor plasmid for PCV2 ORF2.
XX
KW PCV2; porcine circovirus 2; virucide; immunostimulant; vaccine;
KW postweaning multisystemic wasting syndrome; PMWS; infection;
KW pig pathogen; open reading frame 2; ORF2; ss.
XX
OS Porcine circovirus type 2.
OS Synthetic.
XX
PN WO200077216-A2.
XX
PD 21-DEC-2000.
XX
PF 09-JUN-2000; 2000WO-IB00882.
XX
PR 10-JUN-1999; 99US-0138478.
PR 01-JUN-2000; 2000US-0583545.
XX
PA (MERI-) MERTAL.
XX
PI Bublot M, Perez JM, Charreyre CE;
XX
DR WPI; 2001-080692/09.
DR P-PSDB; AAB61154.
XX
PT Novel recombinant virus comprising DNA from porcine circovirus 2 useful
PT as vaccine for treatment and prophylaxis of porcine circovirus
PT infection, such as postweaning multisystemic wasting syndrome in pigs
PT -
XX
PS Example 2; Fig 3; 60pp; English.
XX
CC The present sequence was used in the construction of a recombinant
CC virus comprising DNA from porcine circovirus 2 (PCV2). The
CC recombinant virus is useful as vaccine for treatment and prophylaxis of
CC PCV2 infection, such as postweaning multisystemic wasting syndrome (PMWS)
CC in young pigs.
XX
SQ Sequence 2520 BP; 777 A; 482 C; 382 G; 879 T; 0 other;

Query Match 88.6%; Score 622; DB 22; Length 2520;
Best Local Similarity 92.9%; Pred. No. 7.8e-178;
Matches 652; Conservative 0; Mismatches 50; Indels 0; Gaps 0;

Qy 1 atgacgtatccaaggagcggttacccaagaagaagacacccgcccgagccatcttggc 60
|||
Db 1402 atgacgtatccaaggagcggttacccaagaagaagacacccgcccgagccatcttggc 1461

Qy 61 cagatcctccgcgcgcgcctggtctccaccccgccacccgttacccgctggagaagg 120
|||
Db 1462 cagatcctccgcgcgcgcctggtctccaccccgccacccgttacccgctggagaagg 1521

Qy 121 aaaaatggcatcttcaacacccgcctctcccgacattcggtatactgtcaaggaacc 180
|||
Db 1522 aaaaatggcatcttcaacacccgcctctcccgacattcggtatactgtcaagcgtacc 1581

Qy 181 acagtcagaacgccctcctggtggcggtgacatgatgagattcaataatgactttctt 240
|||
Db 1582 acagtcacaacgccctcctggtggcggtgacatgatgagatttaaaattgacgactttgtt 1641

Qy 241 cccccaggagggggtcaaacccccgcctctgtgcccctttgaatactacagaataagaaag 300
|||
Db 1642 cccccggaggggggaccacaataatctctatacccttgaatactacagaataagaaag 1701

QY 301 gtaaaggtgaattctgtgcccctgctccccgataccccagggtagacaggggagtgggctcc 360
|||||
Db 1702 gtaaaggtgaattctgtgcccctgctccccataccccagggtagatggggagtgggctcc 1761
QY 361 agtgctgttatttagatgataactttgttaacaaggccacagccctcacctatgacccc 420
|
Db 1762 actgctgttattctagatgataactttgttaacaaggccacagccctaacctatgaccca 1821
QY 421 tatgtaaaactactcctcccgccataccataaaccagcccttctcctaccactccgggtac 480
|||||
Db 1822 tatgtaaaactactcctcccgccatacaatcccccaacccttctcctaccactcccggtac 1881
QY 481 tttacccccaaaacctgtcctagatttcaactatgattacttcttaacccaacaaaaga 540
||
Db 1882 ttcacacccccaaaacctgttcttgactccactatgattacttccaacccaataacaaaagg 1941
QY 541 aaccagctgtggctgagactacaacactgctggaatgtagaccacgtaggcctcggcact 600
|||||
Db 1942 aatcagcttggctgagactacaacactctggaatgtggaccacgtaggcctcggcgt 2001
QY 601 gcgttcgaaaacagttatatacgaccaggaatacaatatccgtgtaaccatgtatgtacaa 660
|||||
Db 2002 gcgttcgaaaacagtaatacgaccaggaactacaatatccgtgtaaccatgtatgtacaa 2061
QY 661 ttcagagagaatttaattttaagacccccccactttaacccttaa 702
|||||
Db 2062 ttcagagagaatttaattcttaagacccccccactttaacccttaa 2103

RESULT 3
AAAF75830/C
ID AAF75830 standard; DNA; 2769 BP.
XX
AC AAF75830;
XX
DT 18-MAY-2001 (first entry)
XX
DE Plasmid pJP107 DNA fragment.
XX
KW ALVAC; porcine circovirus-2; vaccine; pig; myocarditis; abortion;
KW intrauterine infection; multisystemic wasting syndrome; ds.
XX
OS Unidentified.
XX
PN WO200116330-A2.
XX
PD 08-MAR-2001.
XX
PF 28-AUG-2000; 2000WO-EP08781.
XX
PR 31-AUG-1999; 99US-0151564.
PR 31-MAY-2000; 2000US-0583350.
XX
PA (MERI-) MERIAL.
PA (UYSA-) UNIV SASKATCHEWAN.
PA (UYBE-) UNIV QUEENS BELFAST.

PI Ellis JA, Allan GM, Meehan B, Clark E, Haines D, Hassard L;
PI Harding J, Charreyre CE, Chappuis GE, Krakowka GS, Audonnet JF;
PI Mcneilly F;
XX
DR WPI; 2001-244408/25.
DR P-PSDB; AAB73273.
XX
PT Use of porcine circovirus-2 immunogen to formulate a vaccine
PT composition to treat pigs against myocarditis, abortion, intrauterine
PT infection and/or post-weaning, multisystemic wasting syndrome
PT associated with PCV-2 -
XX
PS Example 3 #3; Fig 6 #1; 134pp; English.
PS
CC The present invention relates to the use of porcine circovirus-2 (PCV-2)
CC immunogen to formulate a vaccine composition to prevent or treat pigs

CC against myocarditis and/or abortion and/or intrauterine infection and/or
CC post-weaning, multisystemic wasting syndrome and other pathological
CC sequelae associated with PCV-2. The present sequence is a DNA fragment of
CC a plasmid, which expresses gene products of PCV-2.
XX
SQ Sequence 2769 BP; 828 A; 455 C; 538 G; 948 T; 0 other;
Query Match 88.6%; Score 622; DB 22; Length 2769;
Best Local Similarity 92.9%; Pred. No. 8.2e-178;
Matches 652; Conservative 0; Mismatches 50; Indels 0; Gaps 0;
QY 1 atgacgtatccaaggagcggttacccaagaagaagacacccgccccgagccatcttggc 60
|||||
Db 1898 ATGACGTATCCAAGGAGCGGTTACCGCAGAGAAGACACCGCCCCCGAGCCATCTTGGC 1839
QY 61 cagatcctccgcccgcgcgcctggctcgtaacccccccgacccgttacgcgtggagaagg 120
|||||
Db 1838 CAGATCCTCCGCCCGCCCTGGCTCGTCCACCCCGCCACCGCTACCGTTGGAGAAGG 1779
QY 121 aaaaatggcatotttcaacacccgcctctccccgcaccttcggatatactgtcaagcgaacc 180
|||||
Db 1778 AAAAATGGCATCTTCAACACCCGCCCTCTCCGCACCTTCGGATATACTGTCAAGCGTACC 1719
QY 181 acagtcagaacgcccctcctggcggtggacatgatgagattcaatataatgactttctt 240
|||||
Db 1718 ACAGTCACAACACGCCCTCCTCGGCGGTGGACATGATGAGATTTAAAAATTGACGACTTTGTT 1659
QY 241 cccccaggagggggtcaaacccccgcctctgtgccccttgaatactacagaataaagaag 300
|||||
Db 1658 CCCCCGGAGGGGGGACCAAAATCTCTATACCTTTGAATACTACAGAATAAGAAAG 1599
QY 301 gttaaggttgaattctgcccctgctccccgcataccccagggtgacaggggagtgggctcc 360
|||||
Db 1598 GTTAAGGTTGAATTCTGGCCCTGCTCCCCCATCACCCAGGGTGATAGGGGAGTGGGCTCC 1539
QY 361 agtgctgttatttttagatgataaactttgttaacaaaggccacagccctcacctatgacccc 420
|||||
Db 1538 ACTGCTGTTATTCTAGATGATAACTTTGTAAACAAAGGCCACAGCCCTTAACCTATGACCCA 1479
QY 421 tatgtaaaactactcctcccgccataccaataaaccagcccttctcctaccactcccggtac 480
|||||
Db 1478 TATGTAAACTACTCCTCCCGCCATACAATCCCCCAACCCCTTCTCCTACCACCTCCCGTTAC 1419
QY 481 tttacccccaaaacctgtccttagatttcaactattgattacttccaaacaaacaaaaga 540
||
Db 1418 TTCACACCCCAAACCTGTTCTTGACTCCACTATTTGATTACTTCCAACCAATAACAAAAGG 1359
QY 541 aaccagctgtggctgagactacaaaactgctggaaaatgtagaccacgtaggcctcggcact 600
||
Db 1358 AATCAGCTTTGGCTGAGACTACAAACCTCTCTGGAAATGTGGACCACTAGGCCCTCGGGCGCT 1299
QY 601 gcgttcgaaaaacagttatatacgaccaggaatacaatatccgtgtaccatgtatgtacaa 660
|||||
Db 1298 GCGTTCGAAAAACAGTAAATACGACCAGGACTACAATATCCGTGTAAACCATGTATGTACAA 1239
QY 661 ttcagagagaatttaattttaagacccccccacttaacccttaa 702
|||||
Db 1238 TTCAGAGAATTTAATCTTAAAGACCCCCCCTTAACCCCTAA 1197
RESULT 4
AAAF28320/C
ID AAF28320 standard; DNA; 3609 BP.
XX
AC AAF28320;
XX
DT 30-MAR-2001 (first entry)
XX
DE pJP107 donor plasmid for PCV2 ORF2 and ORF1.
XX
KW PCV2; porcine circovirus 2; virucide; immunostimulant; vaccine;
KW postweaning multisystemic wasting syndrome; PMWS; infection;

KW pig pathogen; open reading frame; ORF; ss.
XX Porcine circovirus type 2.
OS Synthetic.
XX WO200077216-A2.
XX PD 21-DEC-2000.
XX 09-JUN-2000; 2000WO-IB00882.
PF 10-JUN-1999; 99US-0138478.
PR 01-JUN-2000; 2000US-0583545.
XX (MERI-) MERIAL.
XX Bublot M, Perez JM, Charreyre CE;
XX WPI; 2001-080692/09.
DR P-PSDB; AAB61155, AAB61156.
XX Novel recombinant virus comprising DNA from porcine circovirus 2 useful
PT as vaccine for treatment and prophylaxis of porcine circovirus
PT infection, such as postweaning multisystemic wasting syndrome in pigs
PT .
XX Example 3; Fig 6; 60pp; English.
PS The present sequence was used in the construction of a recombinant
XX virus comprising DNA from porcine circovirus 2 (PCV2). The
CC recombinant virus is useful as vaccine for treatment and prophylaxis of
CC PCV2 infection, such as postweaning multisystemic wasting syndrome (PMWS)
CC in young pigs.
XX Sequence 3609 BP; 1050 A; 618 C; 737 G; 1204 T; 0 other;
SQ

Query Match 88.6%; Score 622; DB 22; Length 3609;
Best Local Similarity 92.9%; Pred. No. 9.3e-178;
Matches 652; Conservative 0; Mismatches 50; Indels 0; Gaps 0;

QY 1 atgacgtatccaaggaggcggtaccggaagaagacacgccccgcagccatcttggc 60
DB 1898 ATGACGTATCCAAGGAGGCGTTACCGCAGAGAAGACACGCCCCCGCAGCCATCTTGGC 1839
QY 61 cagatcctccgcgcgccccctggctcgtcgtccacccccgcaccggttaccgctggagaag 120
DB 1838 CAGATCCTCCGCCGCCCTGGCTCGTCCACCCCCCGCACCGCTACCGTTGGAGAAG 1779
QY 121 aaaaatggcatcttcaacacccgcctctccccgaccttggatatatactgtcaagcgaaac 180
DB 1778 AAAAAATGGCATCTTCAACACCGCGCTCTCCCGCACCTTCGGATATACTGTCAAGCGTACC 1719
QY 181 acagtcaagaacgcccctctggcggtggacatgatgagattcaatattaatgactttctt 240
DB 1718 ACAGTCACAACGCCCCCTCCTGGCGGGTGGACATGATGAGATTAAAAATTGACGACTTTGTT 1659
QY 241 cccccaggaggggtcaaaccccccgctctgtgccccttgaatactacagaaataagaaag 300
DB 1658 CCCCCGGAGGGGGACCAACAAAATCTCTATACCCCTTGAATACTACAGATAAGAAAG 1599
QY 301 gttaaggttgattctggccccctgctccccgatcacccagggtgacagggggagtgggctcc 360
DB 1598 GTTAAGGTTGAATTCTGGCCCTGCTCCCCCATCACCCAGGGTGATAGGGGAGTGGGCTCC 1539
QY 361 agtgcgtgtatttttagatgataaactttgttaacaaaaggccacagccctcacctatgacccc 420
DB 1538 ACTGCTGTTATTCTAGATGATAAACTTTGTAAACAAAGGCCACAGCCCCCTAACCTATGACCCA 1479
QY 421 tatgtaaaactactcctccgcccataaccataaacccagcccttctcctaccactcccgggtac 480
DB 1478 TATGTAAACTACTCCTCCGCCCATACAATCCCCCAACCCCTTCTCCTACCACCTCCCGTTAC 1419

QY 481 ttatcccccaaacctgtccttagatttcactattgattacttccaacccaacaaacaaaaga 540
DB 1418 TTCACACCCCAACCTGTTCTTGACTCCACTATTGATTACTTCCAACCAATAACAAAAGG 1359
QY 541 aaccagctgtggtgagactacatacaaaactgctggaataatgtagaccacgtaggcctcggcact 600
DB 1358 AATCAGCTTTGGCTGAGACTACAAAACCTCTGAAATGTGGACCACTAGGCGCTCGGGCT 1299
QY 601 gcgttcgaaaacagtagtatatacgaccaggagatacaataatccgtgtaaccatgtatgtacaa 660
DB 1298 GCGTTCGAAAACAGTAAATACGACCAGGACTACAATATCCGTGTAACCATGTATGTACAA 1239
QY 661 ttcagagagaatttaattttaagacccccccacttaaccccttaa 702
DB 1238 TTCAGAGAAATTAATCTTAAAGACCCCCCCTAAACCCCTAA 1197

RESULT 5
AAx83754/C
ID AAX83754 standard; DNA; 1768 BP.
XX AAX83754;
AC AAX83754;
XX 27-AUG-1999 (first entry)
DT Porcine circovirus type II 412 nucleotide sequence.
XX Porcine circovirus type II; PCVII; PCVI; pig; infection; vaccine;
KW postweaning multisystemic wasting syndrome virus; diagnosis; ds.
KW Porcine circovirus.
OS WO9929717-A2.
XX 17-JUN-1999.
PD 11-DEC-1998; 98WO-CA01130.
XX 16-DEC-1997; 97US-0069750.
PR 11-DEC-1997; 97US-0069233.
XX (UYSA-) UNIV SASKATCHEWAN.
PA Babiuk LA, Potter AA, Wang L, Willson P;
PI WPI; 1999-394957/33.
XX New isolated porcine circovirus Type II
PT Claim 1; Fig 2; 82pp; English.
PS The present invention describes a new isolated porcine circovirus
XX Type II (PCVII), obtained from postweaning multisystemic wasting
CC syndrome-affected pigs. AAX83754 to AAX83757 represent PCVII nucleotide
CC sequences. AAY24929 to AAY24934 represent PCVII open reading frame (ORF)
CC proteins (N.B. the PCVII ORFs given in Fig 2A to Fig 2B do not
CC correspond exactly with the PCVII ORFs given in Fig 3A to Fig 3D).
CC The PCVII polypeptides can be used for treating or preventing PCVII
CC infection in vertebrates. The products can also be used to detect the
CC PCVII.
XX Sequence 1768 BP; 454 A; 361 C; 492 G; 461 T; 0 other;
SQ

Query Match 88.4%; Score 620.4; DB 20; Length 1768;
Best Local Similarity 92.7%; Pred. No. 2e-177;
Matches 651; Conservative 0; Mismatches 51; Indels 0; Gaps 0;

QY 1 atgacgtatccaaggaggcggttaccggaagaagacacccccgcagccatcttggc 60
DB 1735 ATGACGTATCCAAGGAGGCGTTACCGCAGAGAAGACACCGCCCCCGCAGCCATCTTGGC 1676
QY 61 cagatcctccgcgcgccccctggctcgttcacccccgccaccgttaccgctggagaag 120

|||||
Db 1675 CAGATCCTCGCGCGCCCTGGCTCGTCCACCCCGCCACCGCTACCGTTGGAGAAGG 1616

QY 121 aaaaaatggcatcttcaacaccccgccctctccgcaccttcggaataactgtcaagcaacc 180
|||||
Db 1615 AAAAATGGCACTTCAACACCCCGCCTCTCCGCACTTCGGATATACTGTCAAGCGTACC 1556

QY 181 acagtcaagaagccctcctggtggcggtggacatgatgagattcaataatgaactttctt 240
|||||
Db 1555 ACAGTCACAACGCCCTCCTGGCGGTGGACATGATGAGATTTAAAAATTGACGACTTGT 1496

QY 241 cccccaggagggtggtcaaacccccgcctctgtgccctttgaatactacagaataaagaag 300
|||||
Db 1495 CCCCCGGAGGGGGACCAACAAAATCTCTATACCCCTTTGAATACTACAGATAAGAAAG 1436

QY 301 gttaaggttgaattctggccctgctcccgatcaaccaggggtgacaggggagtggtcc 360
|||||
Db 1435 GTTAAGGTTGAATTCTGGCCTTGCTCCCCCATCACCCAGGTGATAGGGGAGTGGGTCC 1376

QY 361 agtgcgttatatttagatgataaactttgtacaaaaggccacagccctcacctatgacccc 420
|||||
Db 1375 ACTGCTGTATTTTAGATGATAACTTTGTAAAGGGCCACAGCCCTAACCTATGACCCA 1316

QY 421 tatgtaaaactactcctccgccataaccagcccttctcctaccactccgggtac 480
|||||
Db 1315 TATGTAAACTACTCCTCCGCCATACAATCCCCCAACCCTTCTCCTACCACTCCCGTTAC 1256

QY 481 tttaacccccaaacctgtcctagatttcaactattgattacttccaaacaaacaaaga 540
|||||
Db 1255 TTCACACCCAAACCTGTTCTTGACTCCACTATGATTACTTCCAACCAATAACAAAAG 1196

QY 541 aaccagctgtggctgagactacaaaactgctggaatgtagaccacgtaggcctcggcact 600
|||||
Db 1195 AATCAGCTTTGGCTGAGGCTACAAAACCTCTGGAATGTGGACCACGTAGGCCTCGGCACT 1136

QY 601 gcgttcgaaaacagttatatacgaccagggaataacaatatccgtgtaccatgtatgtacaa 660
|||||
Db 1135 GCGTTCGAAAACAGTAATACGACCAGGACTACAATATCCGTGTAACCATGTATGTACAA 1076

QY 661 ttcagagaatttaattttaagacccccccacttaacccttaa 702
|||||
Db 1075 TTCAGAGAATTTAATCTTAAAGACCCCCCCTGTAACCCCTAA 1034

RESULT 6
AAF75841/c

ID AAF75841 standard; DNA; 1768 BP.
XX
AC AAF75841;
XX
DT 18-MAY-2001 (first entry)
XX
DE PCV DNA fragment of Imp 1121 strain.
XX
KW Vaccine; pig; myocarditis; abortion; intrauterine infection;
KW multisystemic wasting syndrome; ds.
OS Porcine circovirus-2.
XX
PN WO200116330-A2.
XX
PD 08-MAR-2001.
XX
PF 28-AUG-2000; 2000WO-EP08781.
XX
PR 31-AUG-1999; 99US-0151564.
PR 31-MAY-2000; 2000US-0583350.
XX
PA (MERI-) MERIAL.
PA (UYSA-) UNIV SASKATCHEWAN.
PA (UYBE-) UNIV QUEENS BELFAST.
XX
PI Ellis JA, Allan GM, Meehan B, Clark E, Haines D, Hassard L;

PI Harding J, Charreyre CE, Chappuis GE, Krakowka GS, Audonnet JF;
PI Mcneilly F;
XX
DR WPI; 2001-244408/25.
XX
PT Use of porcine circovirus-2 immunogen to formulate a vaccine
PT composition to treat pigs against myocarditis, abortion, intrauterine
PT infection and/or post-weaning, multisystemic wasting syndrome
PT associated with PCV-2 -
XX
PS Claim 11; Fig 7; 134pp; English.
XX
CC The present invention relates to the use of porcine circovirus-2 (PCV-2)
CC immunogen to formulate a vaccine composition to prevent or treat pigs
CC against myocarditis and/or abortion and/or intrauterine infection and/or
CC post-weaning, multisystemic wasting syndrome and other pathological
CC sequelae associated with PCV-2. The present sequence is a DNA fragment of
CC a strain of PCV, which was used in the present invention.
XX
SQ Sequence 1768 BP; 452 A; 359 C; 496 G; 461 T; 0 other;

Query Match 87.9%; Score 617.2; DB 22; Length 1768;
Best Local Similarity 92.5%; Pred. No. 1.9e-176;
Matches 649; Conservative 0; Mismatches 53; Indels 0; Gaps 0;

QY 1 atgacgtatccaaggagcggttacgaagaagaacacccgcgcagccatctgtgc 60
|||||
Db 1735 ATGACGTATCCAAGGAGCGGTTACCGAGAGAAGACACCGCCCGCAGCCATCTTGGC 1676

QY 61 cagatcctccgcgcgcgcctggtcgtccaccccccacccgttacgcgtggagaagg 120
|||||
Db 1675 CAGATCCTCCGCGCGCCCTGGCTCGTCCACCCCGCCACCGTTACCGTTGGAGAAGG 1616

QY 121 aaaaatggcatcttcaacacccgcctctccgcaccccccacccgttacgcgtggagaacc 180
|||||
Db 1615 AAAAATGGCATCTTCAACACACCCCGCTCTCCCGCACCTTCGGATATACTGTCAAGCGTACT 1556

QY 181 acagtcagaacgccctcctggcggtggagacatgatgagattcaataatgaactttctt 240
|||||
Db 1555 ACAGTCACAACGCCCTCCTCGGCGGTGGACATGATGAGATTTAAAAATTGACGACTTTGTT 1496

QY 241 ccccaggagggggtcaaacccccgcctctgtgccctttgaatactacagaataaagaag 300
|||||
Db 1495 CCCCCGGAGGGGGACCAACAAAATCTCTATACCCCTTTGAATACTACAGAATAAAAAAG 1436

QY 301 gttaaggttgaattctgcccctgctcccccgcacccaggtgacaggggagtggtcc 360
|||||
Db 1435 GTTAAGGTTGAATTCTGGCCCTGCTCCCCCATCACCCAGGTGATAGGGGAGTGGGTCC 1376

QY 361 agtgcgttatatttagatgataaactttgtacaaaaggccacagccctcacctatgacccc 420
|||||
Db 1375 ACTGCTGTATTTTAGATGATAACTTTGTACCAAGGCCACAGCCCTAACCTATGACCCA 1316

QY 421 tatgtaaaactactcctccgccataaccagcccttctcctaccactcccggtac 480
|||||
Db 1315 TATGTAAACTACTCCTCCGCCATACAATCCCCCAACCCTTCTCCTACCACTCCCGTTAC 1256

QY 481 tttaacccccaaacctgtcctagatttcaactattgattacttccaaacaaacaaaga 540
|||||
Db 1255 TTCACACCCAAACCTGTTCTTGACTCCACTATGATTACTTCCAACCAATAACAAAAG 1196

QY 541 aaccagctgtggctgagactacaaaactgctggaatgtagaccacgtaggcctcggcact 600
|||||
Db 1195 AATCAGCTTTGGCTGAGGCTACAAAACCTCTAGAAATGTGGACCACGTAGGCCTCGGCACT 1136

QY 601 gcgttcgaaaacagttatatacgaccagggaataacaatatccgtgtaccatgtatgtacaa 660
|||||
Db 1135 GCGTTCGAAAACAGTAATACGACCAGGACTACAATATCCGTGTAACCATGTATGTACAA 1076

QY 661 ttcagagaatttaattttaagacccccccacttaacccttaa 702
|||||
Db 1075 TTCAGAGAATTTAATCTTAAAGACCCCCCCTGTAACCCCTAA 1034

```
RESULT 7
AAF75840/c
ID AAF75840 standard; DNA; 1768 BP.
XX
AC AAF75840;
XX
DT 18-MAY-2001 (first entry)
XX
DE PCV DNA fragment of Imp 1103 strain.
XX
KW Vaccine; pig; myocarditis; abortion; intrauterine infection;
KW multisystemic wasting syndrome; ds.
XX
OS Porcine circovirus-2.
XX
PN WO200116330-A2.
XX
PD 08-MAR-2001.
XX
PF 28-AUG-2000; 2000WO-EP08781.
XX
PR 31-AUG-1999; 99US-0151564.
PR 31-MAY-2000; 2000US-0583350.
XX
PA (MERI-) MERIAL.
PA (UYSA-) UNIV SASKATCHEWAN.
PA (UYBE-) UNIV QUEENS BELFAST.
XX
PI Ellis JA, Allan GM, Meehan B, Clark E, Haines D, Hassard L;
PI Harding J, Charreyre CE, Chappuis GE, Krakowka GS, Audonnet JF;
PI Mcneilly F;
XX
DR WPI; 2001-244408/25.
XX
PT Use of porcine circovirus-2 immunogen to formulate a vaccine
PT composition to treat pigs against myocarditis, abortion, intrauterine
PT infection and/or post-weaning, multisystemic wasting syndrome
PT associated with PCV-2 -
XX
PS Claim 10; Fig 6 #2; 134pp; English.
XX
CC The present invention relates to the use of porcine circovirus-2 (PCV-2)
CC immunogen to formulate a vaccine composition to prevent or treat pigs
CC against myocarditis and/or abortion and/or intrauterine infection and/or
CC post-weaning, multisystemic wasting syndrome and other pathological
CC sequelae associated with PCV-2. The present sequence is a DNA fragment of
CC a strain of PCV, which was used in the present invention.
XX
SQ Sequence 1768 BP; 450 A; 360 C; 496 G; 460 T; 2 other;

Query Match 87.2%; Score 612.4; DB 22; Length 1768;
Best Local Similarity 92.0%; Pred. No. 5.3e-175;
Matches 646; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

QY 1 atgacgtatccaaggaggcggttacccaagaagaagacacccgccccgcagccatcttggc 60
   ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 1735 ATGACATATCCAAGGAGCGGTTACCGCAGAGAAGACACCGCCCCCGCAGCCATCTTGGC 1676

QY 61 cagatcctccgcgcgcgccttgctcgctccacccccgcaccgttacccgtggagaagg 120
   ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 1675 CAGATCCTCCGCGCGCGCCCTGGCTCGTCCACCGCGCCACCGCTACCGTTGGAGAAGG 1616

QY 121 aaaaatggcatcttcaacaccccgccctctcccgcaccttcggatatactgtcaagcgaacc 180
   ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 1615 AAAAATGGCATCTTCAACACCGCGCTCTCCCGCACCTTCGGATATACTGTCAAGCGTACC 1556

QY 181 acagtcagaacgccctcctggcggtggacatgatgagattcaatattaatgactttctt 240
   ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 1555 ACAGTCACAACGCCCTCTCTGGGGGGTGGACATGATGAGATTTAAAAATTGACGACTTTGTT 1496
```

```
QY 241 cccccaggagggggtcaaacccccgcctctgtgccccctttgaatactacagaataaagaaag 300
   ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 1495 CCCCCGGGAGGGGGACCAAAATCTTATACCCCTTTGAATACTACAGAATAAGAAAG 1436

QY 301 gttaaagttgaattctgcccctgctcccgcgatcacccccagggtgacaggggagtggtctcc 360
   ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 1435 GTTAAGGTTGAATTCTGGCCCTGCTCCCCCATCACCCAGGGTGATAGGGGAGTGGGCTCC 1376

QY 361 agtgctgttatttttagatgataaactttgtaacaaaggccacagccctcacctatgacccc 420
   ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 1375 ACTGCTGTATTCTAGATGATAACTTTGTACCAAAGGCCACAGCCCCAACATATGACCCA 1316

QY 421 tatgtaactactcctcccgccataccataaacccagcccttctctaccactcccgggtac 480
   ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 1315 TATGTAAACTACTCCTCCCGCCATACAAATCCCCCAACCCCTTCTCCTACCACTCCCGTTAC 1256

QY 481 tttaacccccaaaacctgtccttagatttcaactattgattacttccaaacaaacaaagaa 540
   || || ||||| ||||| || || ||||| ||||| ||||| ||||| ||||| |||||
Db 1255 TTCACACCCCAAAACCTGTTCTTGACTCCCACTATTGATTACTTCCAACCAATAACAAAAGG 1196

QY 541 aaccagctgtggctgagactacaaaactgctggaaaatgtagaccacgtaggcctcggcact 600
   || ||||| ||||| ||||| ||||| || ||||| ||||| ||||| ||||| |||||
Db 1195 AATCAGCTTTGGCTGAGGCTACAAAACCTCTAGAAAATGTGGACCACGTAGGCCTCGGCAC 1136

QY 601 gcgttcgaaaaacagtatatacgcaccaggaataacaaatatccgtgtaaccatgtatgtacaa 660
   ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 1135 GCGTTCGAAAAACAGTAAATACGACCAGGACTACAATATCCGTGTAAACCTGTATGTACAA 1076

QY 661 ttcagagaattttaattttaagacccccccacttaaccccttaa 702
   ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 1075 TTCAGGGAATTTAATCTTAAAGACCCCCCACTTAACCCCTTAA 1034

RESULT 8
AAX83755/c
ID AAX83755 standard; DNA; 1786 BP.
XX
AC AAX83755;
XX
DT 27-AUG-1999 (first entry)
XX
DE Porcine circovirus type II 9741 nucleotide sequence.
XX
KW Porcine circovirus type II; PCVII; PCVI; pig; infection; vaccine;
KW postweaning multisystemic wasting syndrome virus; diagnosis; ds.
XX
OS Porcine circovirus.
XX
PN WO9929717-A2.
XX
PD 17-JUN-1999.
XX
PF 11-DEC-1998; 98WO-CA01130.
XX
PR 16-DEC-1997; 97US-0069750.
PR 11-DEC-1997; 97US-0069233.
XX
PA (UYSA-) UNIV SASKATCHEWAN.
XX
PI Babiuk LA, Potter AA, Wang L, Willson P;
XX
DR WPI; 1999-394957/33.
XX
PT New isolated porcine circovirus Type II
XX
PS Claim 1; Fig 4; 82pp; English.
XX
CC The present invention describes a new isolated porcine circovirus
CC type II (PCVII), obtained from postweaning multisystemic wasting
CC syndrome-affected pigs. AAX83754 to AAX83757 represent PCVII nucleotide
CC sequences. AAY24929 to AAY24934 represent PCVII open reading frame (ORF)
CC proteins (N.B. the PCVII ORFs given in Fig 2A to Fig 2B do not
CC correspond exactly with the PCVII ORFs given in Fig 3A to Fig 3D).
```


QY 534 caaagaacacagctgtggtgagactacaaaactgctggaaatgtagaccacgtaggcct 593
||||| || ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 784 CAAAGGAATCAGCTTTGGCTGAGGCTACAAACCTCTGGAATGTGGACCACGTAGGCCT 725

QY 594 cggcactgcgttcgaaaacagtatatac-gaccaggaatacacaatatccogtgaaccatgt 652
||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 724 CGGCACTGCGTTTCGAAAACAGTAAATACAGACCAGGACTACAATATCCGTGTAACCATGT 665

QY 653 atgtacaattcagagaatttaattttaagagacccccccacttaacccttaa 702
||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 664 ATGTACAATTCAGAGAATTTAATCTTAAAGACCCCCCCTTAAACCCCTAA 615

RESULT 10
AAX35378/c
ID AAX35378 standard; DNA; 1767 BP.
XX
AC AAX35378;
XX
DT 07-JUL-1999 (first entry)
XX
DE Nucleotide sequence of PCV isolate Impl011-48121.
XX
KW PCV isolate; type II porcine circovirus; PCV; PMWS;
KW porcine multisystemic wasting syndrome; pig; vaccine; ss.
XX
OS Porcine circovirus.
XX
PN WO9918214-A1.
XX
PD 15-APR-1999.
XX
PF 01-OCT-1998; 98WO-FR02107.
XX
PR 20-MAR-1998; 98FR-0003707.
PR 03-OCT-1997; 97FR-0012382.
PR 22-JAN-1998; 98FR-0000873.
XX
PA (MERI-) MERIAL.
PA (UYBE-) UNIV QUEENS BELFAST.
PA (UYSA-) UNIV SASKATCHEWAN.
XX
PI Allan G, Chappuis GE, Charreyre CE, Clark E, Ellis J;
PI Haines D, Harding J, Hassard L, Meehan B;
XX
DR WPI; 1999-264024/22.
XX
PT New type II porcine circovirus
XX
PS Claim 11; Fig 1; 56pp; French.
XX
CC The present sequence represents the nucleotide sequence of PCV isolate
CC Impl011-48121. The specification describes a preparation of type II
CC porcine circovirus (PCV), which is particularly isolated from a lesion,
CC from a pig with symptoms of PMWS (porcine multisystemic wasting
CC syndrome). PCV (attenuated or inactivated), polypeptides derived from
CC it, and vectors that express these polypeptides are all useful in
CC vaccines, suitable for administration to adult or young pigs, or to
CC pregnant sows (for passive immunization of their offspring). DNA
CC isolated from PCV is used for in vivo or in vitro expression of viral
CC polypeptides, also as probes or primers for diagnosis in usual
CC hybridization or amplification assays. These polypeptides may also be
CC used diagnostically to detect PCV-specific antibodies, while antibodies
CC raised against the polypeptides can be used to detect antigens, in any
CC usual immunoassay format.
XX
SQ Sequence 1767 BP; 447 A; 360 C; 502 G; 458 T; 0 other;

Query Match 54.4%; Score 381.6; DB 20; Length 1767;
Best Local Similarity 99.0%; Pred. NO. 4.2e-105;
Matches 384; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 315 ctggccctgctccccgatcacccaggggtgacagggggagtgggctccagtgctgtatttt 374
||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 1767 CTGGCCCTGCTCCCCGATCACCCAGGTGACAGGGGAGTGGGCTCCAGTGCTGTATTCT 1708

QY 375 agatgataactttgtatacaaggccacagccctcacctatgacccctatgtaaactactc 434
||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 1707 AGATGATAACTTTGTAAACAAAGGCCACACGCCCTCACCTATGACCCCTATGTAAACTACTC 1648

QY 435 ctcccgccataccataaaccagcccttctcctaccactcccgttactttacccccaaacc 494
||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 1647 CTCCCGCCATACCATAACCCAGCCCTTCTCCTACCACTCCCGCTACTTTACCCCAAACC 1588

QY 495 tgtcctagatttcactattgattacttccaaacccaaacaaagaaacacagctgtggct 554
||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 1587 TGTCTTAGATTCCACTATTGATTACTTCCAACCAACAAACAAAGAAACCAACGCTGTGGCT 1528

QY 555 gagactacaaaactgctggaatgtagaccacgtaggcctcggcactgcgttcgaaaaacag 614
||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 1527 GAGACTACAAACTGCTGGAATGTAGACCACGTAGGCCCTCGGCACCTGCGTTTCGAAAAACAG 1468

QY 615 tatatacgaccaggaataacaatatcccggtgaaccatgtatgtacaattcagagaaatttaa 674
||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 1467 TATATACGACCAGGAATACAATATCCGTGTAAACCATGTATGTACAATTTCAGAGAATTTAA 1408

QY 675 ttttaaagacccccccacttaacccttaa 702
||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 1407 TCTTAAAGACCCCCCCTTAAACCCCTTAA 1380

RESULT 11
AAX35210/c
ID AAX35210 standard; DNA; 1767 BP.
XX
AC AAX35210;
XX
DT 01-JUL-1999 (first entry)
XX
DE Nucleotide sequence of PCV isolate Impl011-48121.
XX
KW PCV isolate; type II porcine circovirus; PCV; PMWS;
KW porcine multisystemic wasting syndrome; pig; vaccine; ss.
XX
OS Porcine circovirus.
XX
PN FR2769322-A1.
XX
PD 09-APR-1999.
XX
PF 22-JAN-1998; 98FR-0000873.
XX
PR 03-OCT-1997; 97FR-0012382.
XX
PA (MERI-) MERIAL SAS.
XX
PI Allan G, Chappuis GE, Charreyre CE, Clark E, Ellis J;
PI Haines D, Harding J, Hassard L, Meehan B;
XX
DR WPI; 1999-246948/21.
XX
PT New type II porcine circovirus, used for, e.g. passive immunization
PT of pregnant sows
XX
PS Claim 14; Fig 1; 48pp; French.
XX
CC The present sequence represents the nucleotide sequence of PCV isolate
CC Impl011-48121. The specification describes a preparation of type II
CC porcine circovirus (PCV), which is particularly isolated from a lesion,
CC from a pig with symptoms of PMWS (porcine multisystemic wasting
CC syndrome). PCV (attenuated or inactivated), polypeptides derived from
CC it, and vectors that express these polypeptides are all useful in
CC vaccines, suitable for administration to adult or young pigs, or to
CC pregnant sows (for passive immunization of their offspring). DNA

Db 1407 TCTTAAAGACCCCCCACTTAACCCCTTAA 1380

RESULT 15

AAAX35211/c

ID AAX35211 standard; DNA; 1767 BP.

XX

AC AAX35211;

XX

DT 01-JUL-1999 (first entry)

XX

DE Nucleotide sequence of PCV isolate Impl011-48285.

XX

KW PCV isolate; type II porcine circovirus; PCV; PMWS;

KW porcine multisystemic wasting syndrome; pig; vaccine; ss.

XX

OS Porcine circovirus.

XX

PN FR2769322-A1.

XX

PD 09-APR-1999.

XX

PF 22-JAN-1998; 98FR-0000873.

XX

PR 03-OCT-1997; 97FR-0012382.

XX

PA (MERI-) MERIAL SAS.

XX

PI Allan G, Chappuis GE, Charreyre CE, Clark E, Ellis J;

PI Haines D, Harding J, Hassard L, Meehan B;

XX

DR WPI; 1999-246948/21.

XX

PT New type II porcine circovirus, used for, e.g. passive immunization

PT of pregnant sows

XX

PS Claim 14; Flg 2; 48pp; French.

XX

CC The present sequence represents the nucleotide sequence of PCV isolate Impl011-48285. The specification describes a preparation of type II porcine circovirus (PCV), which is particularly isolated from a lesion, from a pig with symptoms of PMWS (porcine multisystemic wasting syndrome). PCV (attenuated or inactivated), polypeptides derived from it, and vectors that express these polypeptides are all useful in vaccines, suitable for administration to adult or young pigs, or to pregnant sows (for passive immunization of their offspring). DNA isolated from PCV is used for in vivo or in vitro expression of viral polypeptides, also as probes or primers for diagnosis in usual hybridization or amplification assays. These polypeptides may also be used diagnostically to detect PCV-specific antibodies, while antibodies raised against the polypeptides can be used to detect antigens, in any usual immunoassay format.

XX

SQ Sequence 1767 BP; 448 A; 359 C; 500 G; 460 T; 0 other;

Query Match

Best Local Similarity 53.9%; Score 378.4; DB 20; Length 1767;

Matches 382; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

QY 315 ctggccctgctccccgatcacccagggtgacaggggagtgggctccagtgctgtatttt 374

Db 1767 CTGGCCCTGTCTCCCGCATCACCCAGGGTGACAGGGGAGTGGGCTCCAGTGCTGTATTCT 1708

QY 375 agatgataactttgtacaaaagccacagccctctcctaaccactccgggtactttacccccaaacc 434

Db 1707 AGATGATAACTTTGTACAAAGGCCACAGCCCTCACCTATGACCCCTATGTAAACTACTC 1648

QY 435 ctcccgccataaccataaaccagcccttctcctaaccactccgggtactttacccccaaacc 494

Db 1647 CTCCCGCCATACCATAACCCAGCCCTTCTCCTACCACTCCCGCTACTTTACCCCAAAACC 1588

QY 495 tgtcctagatttcactattgatttacttccaacaaacaaacaaacagctgtggt 554

Db 1587 TGTCTAGATTCCACTATTGATTACTTCCAACCAACAACAAAGAAATCAGCTGTGGCT 1528

QY 555 gagactacaaactgctggaaatgtagaccacgtagggcctcggcactgcgttcgaaaaacag 614

Db 1527 GAGACTACAAACTACTGGAAATGTAGACCACGTAGGCCCTGGCACTGCGTTCCGAAAACAG 1468

QY 615 tatatacgaccagggaataacaatatatccgtgtgtaaccatgtatgtacaatttcagagaatttaa 674

Db 1467 TATATACGACCAGGAATACAAATATCCGTGTAAACCATGTATGTACAATTTCAGAGAATTAA 1408

QY 675 ttttaaagaccccccaacttaacccttaa 702

Db 1407 TCTTAAAGACCCCCCACTTAACCCCTTAA 1380

Search completed: July 23, 2002, 10:02:04
Job time: 8290 sec